The Nagant revolver Model 1895 - Historic details

The international renown of the firm Nagant was closely linked to its commercial success with a favorite customer : Russia. Nagant had made a decisive step and secured a favored position within Russian military circles with the issue of the Mosin-Nagan model 1891 rifle which was developed together with Colonel Ivanovith Mosin.

Lйon Nagant was also most certainly aware that the old Russian heavyweight Smith & Wesson service revolver, in .44 caliber, was likely to be superseded in a relatively short period of time by a more modern and handy small caliber weapon as that was the trend throughout Europe.

Russian Smith & Wesson (Belgian AMI revue)

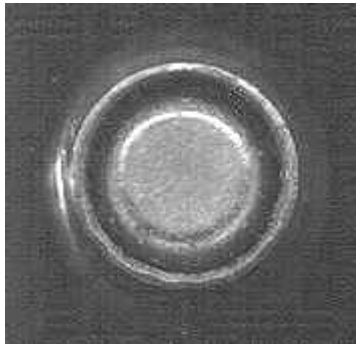
He therefore proposed to the Russian authorities that they test the service proved Belgian and Swedish models and a totally brand new one embodying a quite original "gas check" system. The new weapon was designed to prevent any gas leakage, upon firing, between the cylinder and the rear of the barrel. That goal was reached using a horizontally moving cylinder

Nagant Mod. 1895

The first developments in the Nagant firm regarding the new revolver dated back to the start of the 1890's. Another Belgian firearms maker, Henri Pieper, had already by that time designed a revolver of its own, in caliber 7,62 mm, functioning with a similar device but with a better loading system relying on a left-swinging cylinder embodying a star shaped collective extractor. However the internal Pieper mechanism was generally considered to be an intricate one and therefore potentially too "fragile" to gain the favors of military customers. These particular "gas seal" Pieper firearms were also found in the form of revolving carbines.

The Pieper 7.62 mm ammunition is 41 mm long (Nagant : 38.8 mm).

Externally, the new Nagant revolver looked quite similar to its predecessors. The main differences were a forward movable cylinder and a specifically designed cartridge, whose bullet was seated deeply inside the case. This very long ammunition, which protruded of some 2 mm out the front of the cylinder's chambers, provided a continuing hermetic tube through which there was no possibility for gas to escape.



ammunition 7.62 mm Nagan (Fiocchi)
http://www.studionet.it/mori/mori.htm

total length	38.8 mm
bullet length	16.4 mm
total weight	12.3 g.
bullet weight	7.0 g.
powder weight	0.53 g.
real caliber	7.8 mm
crimping diam.	7.0 a 7.8 mm
case base diam.	9.0 a 9.1 mm
rim diam.	9.7 a 9.8 mm
initial speed	300 m/s
energy	32 kgm

Russia, under the reign of Tsar Alexandre III (1881 - 1894), after having adopted the Mosin-Nagant 3 lines (caliber 7.62 mm) rifle, launched a survey to find a new handgun that could validly replace their Smith & Wesson .44 service revolver. Several models were tested, among which the French Saint-Etienne model 1892 revolver. Finally, in 1895 (under the reign of Nicolas II), the Nagant "gas seal" model was adopted.

Before the Belgian production of the 1895 model had begun, in 1889, Emile Nagant became blind and left the firm totally in the hands of his brother Lйon. The name of the company was changed to : "Fabrique d'Armes Lйon Nagant". This explains why the new revolvers were produced with the sole "L. NAGANT" name struck on the left side of them.

Commercial production of the 1895 model was also launched along with the production for Russia and both were fitted with a double-action lock. The weapons devoted to Russia, upon their entrance in the country, were controlled and proof marked on the right side of the frame with the Imperial Eagle surmounting the number "II" standing for Nicolas II. On several 1895's made in Belgium, the original front sight - bearing a notch - was later replaced by the current half-moon type of the Imperial model made by the Tula arsenal.

By the end of 1899, following an agreement allowing Russia to produce the weapon, the first home-made revolvers left the state arsenal of Tula. These guns did not bear any mention of Nagant's patent. For economical reasons their lock was of single-action type (beside reducing the number of parts, firing in that mode is lengthier and as such prevents the spraying of costly ammunition). The front sight was half-moon shaped to ease the draw from the holster.

Nagant "Tula" 1912 to be sold for $425 by collectiblefirearms.com

From 1899 on, one can say that the revolver Nagant mod. 1895 actually became a Russian weapon. The production would last until the end of WW II.

Depending upon the time period, one can find different markings on these revolvers. Those produced under the Tsar reign bear the mark : "Imperial Manufacture"

Imperial Firearms Manufacture of Tula - 1902 -

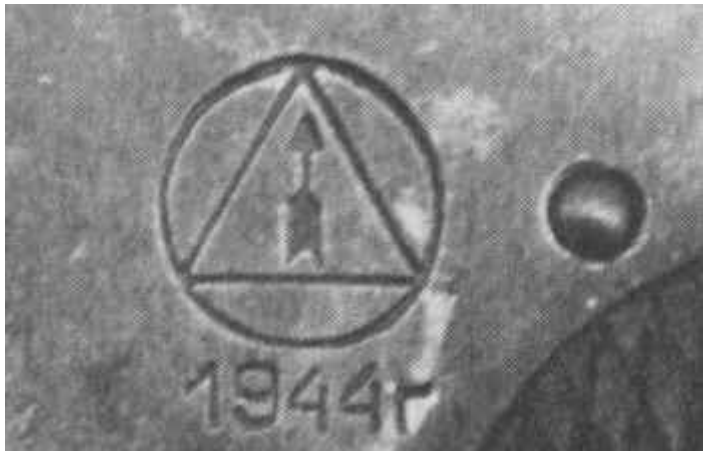
Imperial Firearms Manufacture of Tula under Peter the Great
From 1915 on

After the Russian 1917 revolution, new markings in keeping with the new political regime appeared. Some of the previous markings found on Tsarist revolvers were punched out to erase the mention of the Imperial origin of the state arsenal of Tula.

First line of the marking, punched out

Soviet Tula markings - from 1924 on -

Soviet Tula markings - from 1929 on -



Soviet Tula markings - from 1944 on -

All of the Russian 1895 revolvers manufactured after the revolution were fitted with a double-action lock. The shift from one lock to the other was easily made on the single-action model by adding a catch to the hammer's breast and slightly changing the shape of the sliding breech bolt. Many single-action Imperial revolvers were upgraded with a double-action lock by private gunsmiths even before the revolution.

Former single-action lock upgraded to double-action
http://www.studionet.it/mori/mori.htm

The Russian Nagant revolvers were field tested during the war against Japan (1904 - 1905). It is why some of them, captured by the Japanese, are found today bearing Japanese markings.

After the October Bolchevic revolution, model 1895 production resumed in 1925. Besides new specific markings relating to the regime, all these arms were fitted with a double-action lock and a notched front sight. The production lasted until 1944.

Nagant "Tula" 1941 to be sold for $295 : collectiblefirearms.com

There are only a few variations of the Russian 1895 revolver. One exists, allegedly devoted to the secret services agents of the GPU, equipped with a shorter barrel and reduced handle . There is also a target model with a longer barrel in .22 caliber. It seems that a .38 Special version was also found.

"GPU" short version

From 1923 on, the Soviet authorities initiated a series of tests to choose a semi-auto pistol. The Korovin 7,65 mm pistol was the first contender. But by 1924, a model designed by Prilutskiy in the same caliber entered the lists. In 1929, both contenders (Korovin and Prilutskiy) modified their pistol to cope with the 7,63 mm Mauser cartridge which evolved later into the 7,62 mm Tokarev.

Eventually, in 1930, the model designed by the old Tokarev (he was more than sixty years old at that time) was adopted without enthusiasm. The pistol was named TT-30 for Tula-Tokarev 1930. Three years later, afterundergoing some minor improvements, it became the TT-33. With the advent of WW II, as a result of the urgency and huge needs for firearms of all sorts, the Nagant revolver remained in production along with the TT-33 until the end of the War.

Tokarev TT-33

Outside of Russia, the Nagant 1895 revolver was also found in Poland where it was produced from 1930 on at the Radom arsenal. Nagant's production machinery was purchased from the firm which was facing liquidation at that time. These Polish Nagant revolvers were identical to the Russian ones except for the producer markings : "F.B. RADOM Ng 30" struck on the left frame side and the Polish Eagle on the right side.

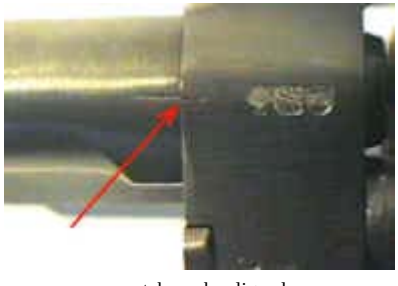
Takedown of the revolver Nagant Mod. 1895

The dismounting of the Nagant 1895 starts, as it is often the case with this kind of European old-timer, by the classical forward pull of the ejector rod, which hangs below the barrel and is nested inside the cylinder's hollow axis. First, turn the ejector knob counter-clockwise until it stops and pull the rod until the knob is nearly even with the barrel's muzzle. The sleeve - around the barrel basis - which holds the rod, can be then turned toward the right side of the gun until the match marks on the sleeve and the barrel are aligned. It is then possibleto pull the cylinder arbor toward the front and remove it from the frame.

ejector rod under the barrel

bolt notch on the ejector rod

sleeve rotation



match marks aligned

takedown of the cylinder arbor

cylinder arbor out of the frame

Once the cylinder arbor is removed, open the loading gate on the right side and take out the cylinder toward the right. The cylinder bears a bushing that can be extracted by first turning it until its small lug aligns with an exit track in the cylinder. The bushing then pops up under the pressure of its spring.

open the loading gate

push the cylinder by the left

the emptied frame

cylinder and its bushing

retaining lug on the bushing

dimounted bushing

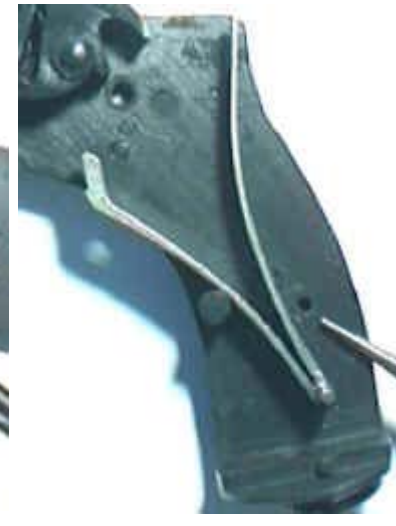
To access the lock mechanism, first remove the large screw located above the top center of the right grip panel. Removal of this screw will release the entire left side of the frame, including the grip panel, to be taken off toward the left.

dismounting screw

internal face of the left grip panel

external face of the same

The left panel removal provided full access to the lock mechanism. Back out the large screw at the upper front of the trigger guard. It does not have to be entirely removed to allow the guard to be swung down and the rear arm lifted off its frame post. Now grasp the mainspring with a smooth parallel-jaw pliers, compress it slightly, and lift its rear mounting stud from the hole in the grip frame. The spring can then be removed downward and to the rear.

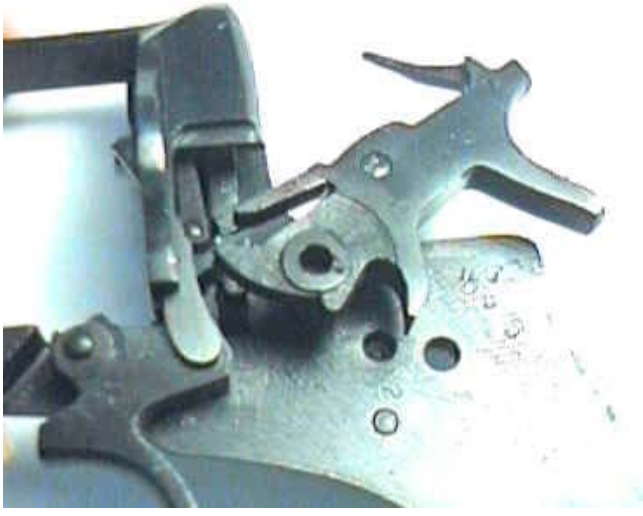


guard turned around its rear axis

grasp of the mainspring

retaining hole in the grip frame

Tip the hammer back to clear the frame and lift it off. The mobile firing pin is retained on the hammer with a cross-pin, but removing it is not advisable in normal takedown. Tip the cylinder hand back to clear the frame and lift the trigger off. The cylinder hand is easily detached from the trigger



hammer lift off

cylinder hand clearing the frame shield

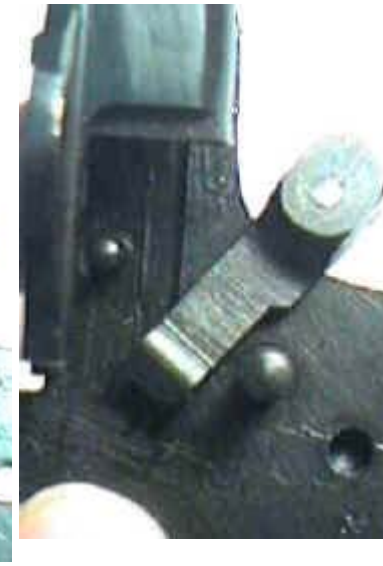
removing of the cylinder hand from the trigger

downward sliding of the camming block

The Nagant 1895 revolver has a very particular functioning system relying on some specific parts never seen in other current revolvers, such as a breech-block and a bolt to lock it. The bolt - which is a camming piece as well - is first removed by sliding it downward and lifting it off. Now tip the breech-block back around its axis until it clears the frame and lift it off its post.

breech-bolt dismounted

breech-block on its post



breech-block dismounted

On the right side of the gun you will find the loading gate and its spring blade. To take down this spring, unscrew its large retaining screw and remove the spring toward the rear and downward out of its recess in the frame. The loading gate is articulated around a pivot screw. Unscrew it and remove the loading gate from its loop on the frame. The ejector rod is maintained inside the sleeve by a spring blade bearing a stud which slides in the groove machined along the rod. The take down of the spring blade, by removing its screw, allows the ejector rod to be pulled out of the sleeve toward the front.

loading gate spring retaining screw

loading gate spring dismounted

loading gate pivot screw

loading gate dismounted

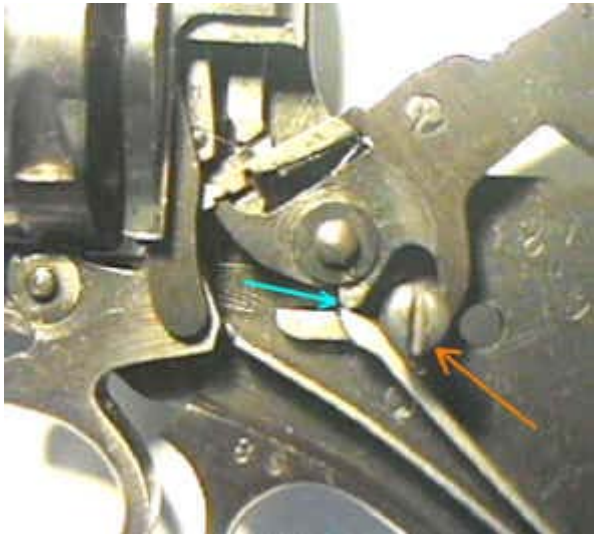
ejector rod spring retaining screw - after takedown

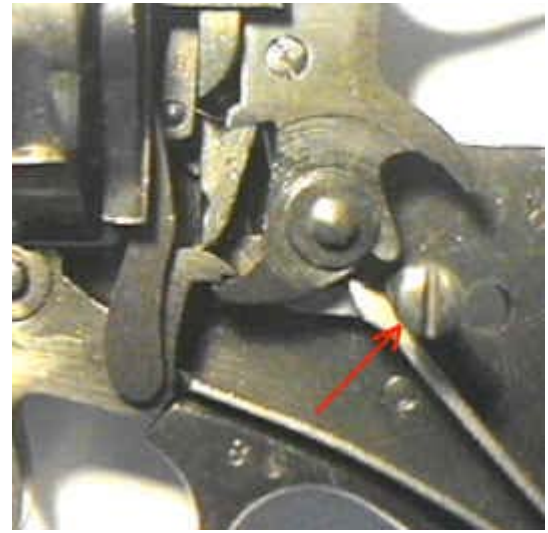
If your Nagant 1895 is equipped with a double-action (trigger-cocking) lock, the hammer has a strut. This strut - or catch - is retained by a pivot screw. A tiny "V" spring actuates this strut and must be put back in the correct position as the two limbs are different. As stated before, it is unwise to drive out the striker pin if not necessary.

double-action hammer with a strut

strut and its "V" spring dismounted

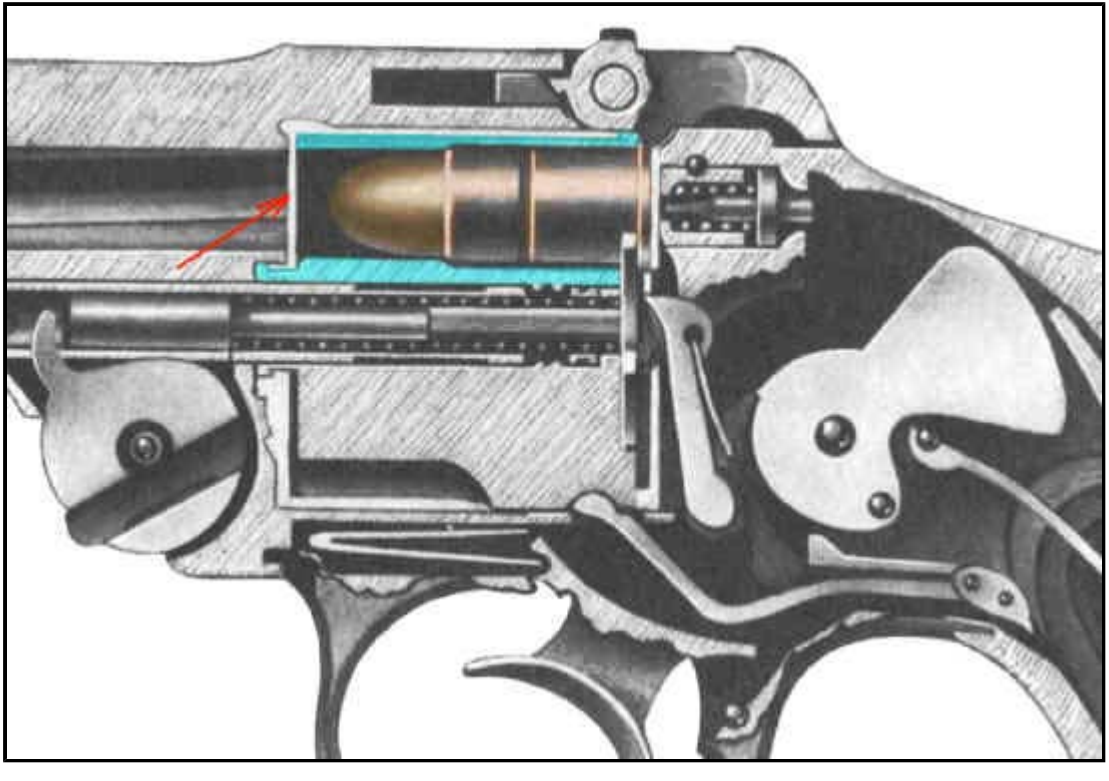
Now, to allow the takedown of the hammer alone without having to dismount the main spring, there is a trick you can use. On the inner face of the frame, just below the hammer's foot, one can see a screw hole. When the hammer is cocked, the top main spring limb is forced downward by the hammer (blue arrow). It is possible then to screw in this hole the left grip panel retaining screw (orange arrow). When the hammer is released by a pressure on the trigger, it is freed from the main spring, the top limb of which has been retained by the screw. Just pull the trigger a little bit in order for its rear arm (sear) to disengage from the hammer strut, and lift the hammer off.





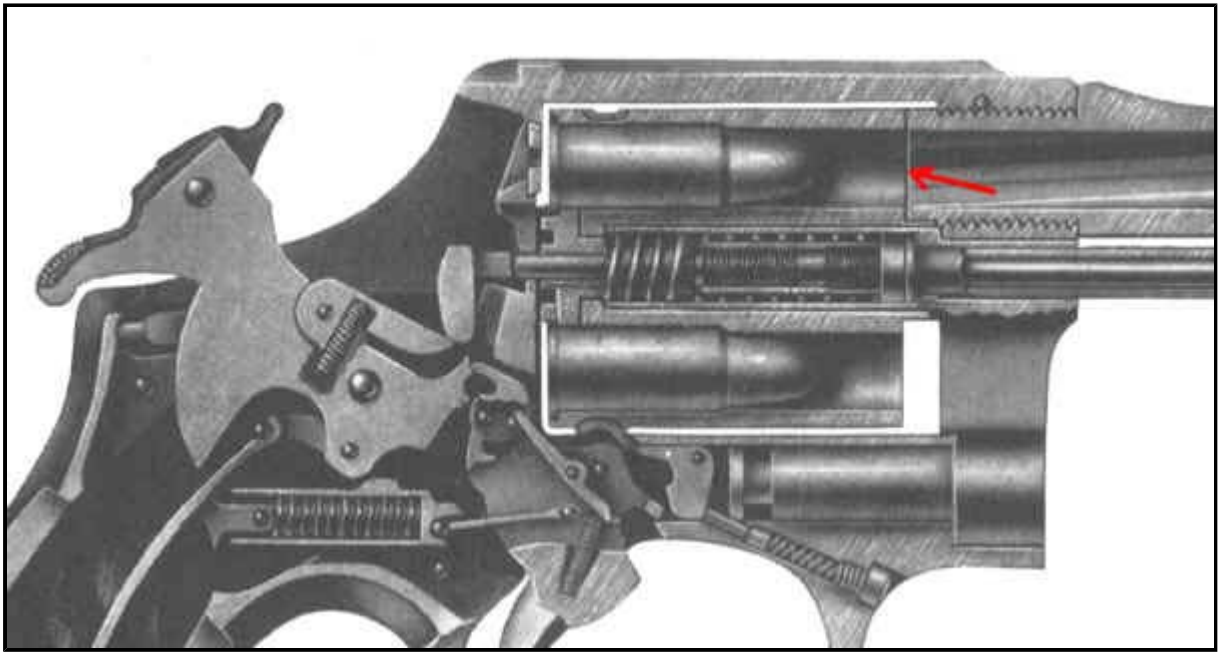
Bibliographical and pictures sources :

The Nagant model 1895 owes a great part of its commercial success to an effective technical answer to the classical drawback of any regular revolver design, which is the gas leakage at the barrel-cylinder joint. The left arrow on the picture below shows the gap space involved. The leakage of some of the thrusting gases naturally results in a loss of power, and this was a concern for the users (mainly military) as well as the designers who were willing to address it.

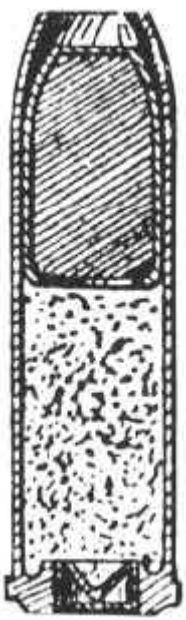


Smith & Wesson safety hammerless model - (© Book of pistols and revolvers by Smith)

Without doubt, one of the most logical solutions was to reduce the barrel-cylinder joint space as much as possible when machining and assembling the parts. However the technical capabilities to do that were not readily available at the early days of this industry. Nowadays, the mechanics have reached such a degree of precision, and the potency of certain ammunition is so high that a partial loss of power may be considered negligible.



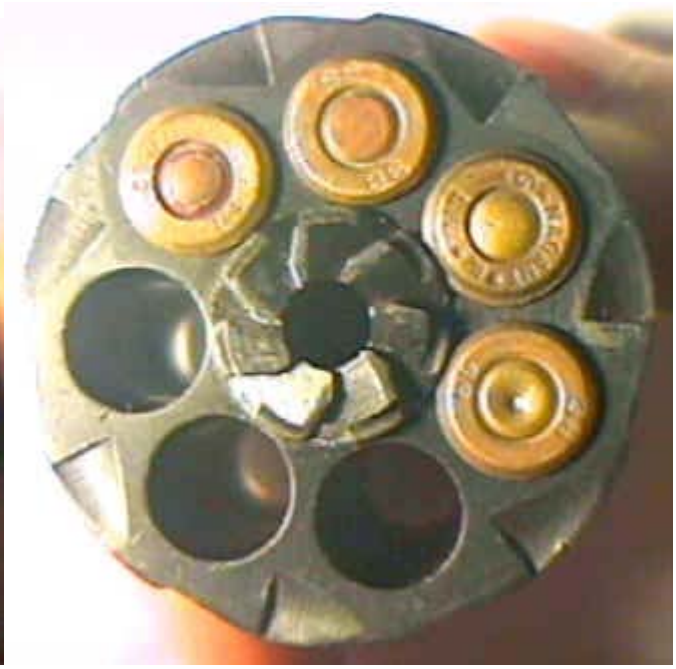
English service revolver - Smith & Wesson no 2 - (© Book of pistols and revolvers by Smith)



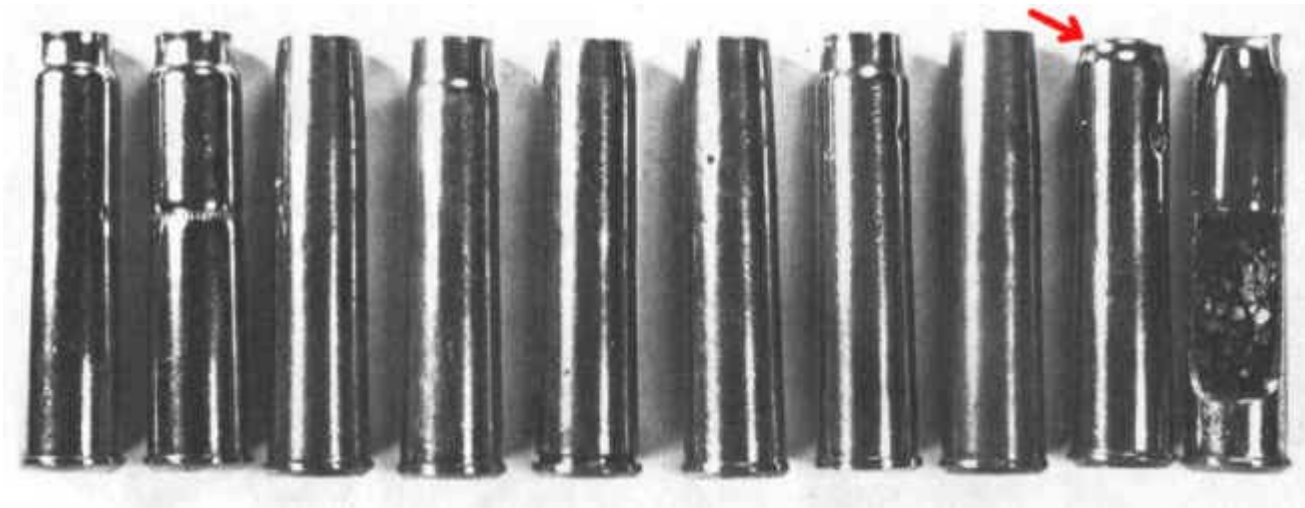
The Nagant brothers opted for a very sophisticated mechanical solution which proved to be very long lasting as the principles involved were retained and kept in usage and production for more than fifty years by one of the most powerful armies in the world.

To close the gap between the barrel and the cylinder, there is no option other than bringing the two parts closer together. And since the barrel is stationary, the most logical way to do was to add a horizontal movement to the cylinder which was already a mobile part. Also and without any doubt, closing the barrel's breech with the front of a chamber of the cylinder could reduce gas leakage, but a full gas-proof seal could not be obtained that way.

The solution proposed by the Nagant brothers or Henri Pieper, another well known Belgian firearms maker of Liиge who made this kind of revolver even before the Nagant's, was to create a specific cartridge with the bullet seated entirely inside the brass case. When loaded into the cylinder, the case mouth protruded by some 2 mm out from the front of the chamber. When the cylinder moved forward prior to firing, the protruding case would overlap the barrel breech. At the instant of firing, under the thrust of the gases, the cartridge case tightly adhered to the wall of the chamber and formed a gas-proof bridge across the small open space between the barrel and the cylinder.

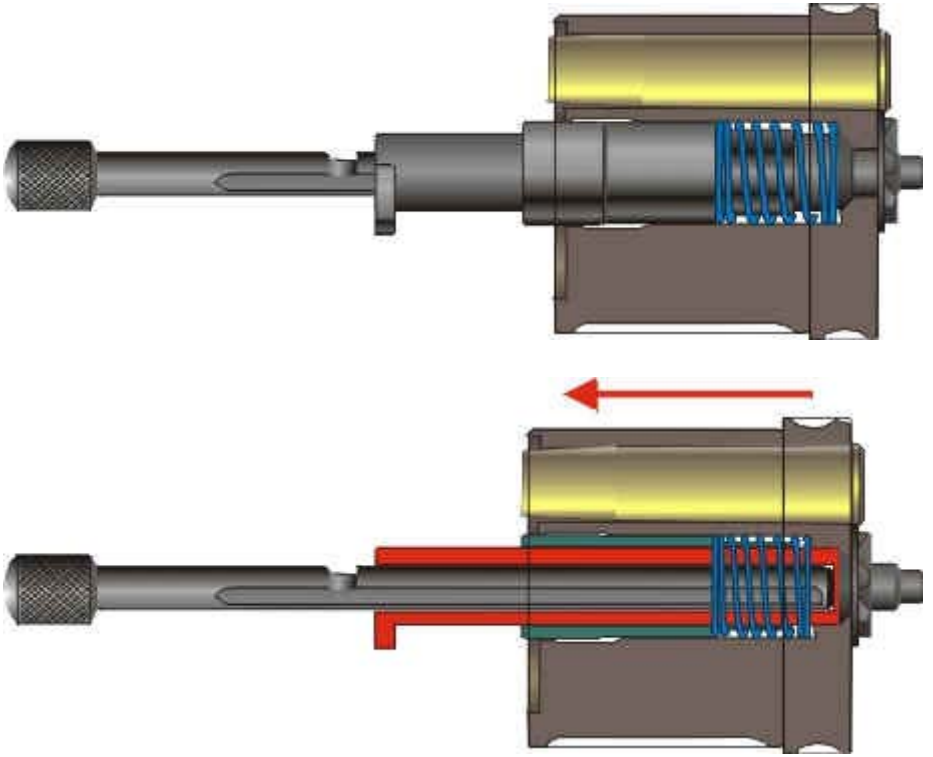


1 - French SFM ammunition with the bullet very close to the case mouth.
2 - Russian ammunition with the bullet seated very low (invisible on the picture) in the case.
3 - Italian Fiocchi ammunition with the case trimmed down and the bullet's face slightly out of the case.
4 - Russian ammunition with the case expanded by firing.



series of 7,62 mm ammo - The red arrow points onto a Fiocchi with a shorter case.

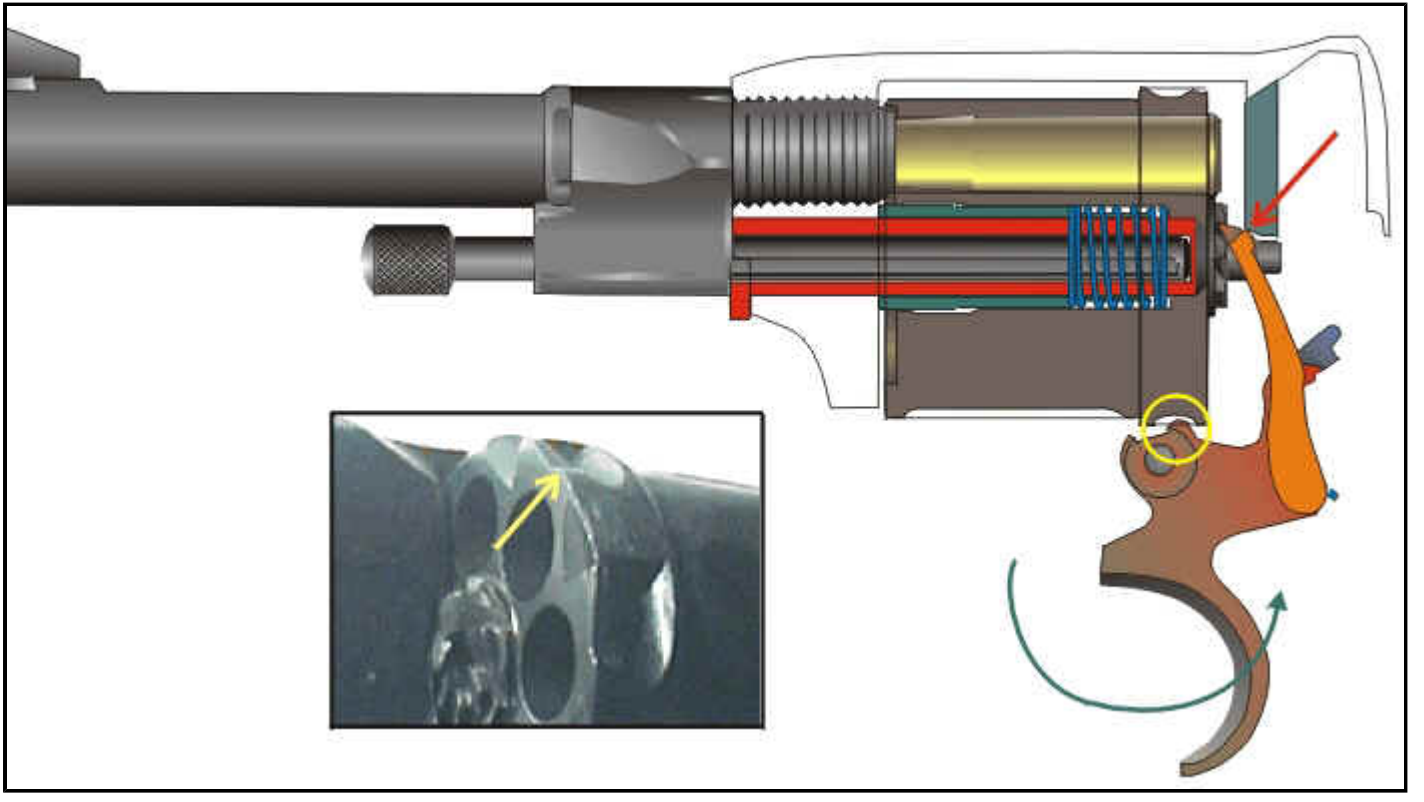
Once the mechanical principle was set on paper, it remained to be put into practice. The first step was to design the cylinder's components so that it could move horizontally. To do that a spring loaded bushing was created that would slide into the cylinder's hollow axis. A retaining-wall of the bushing acts as a stop for its recoil spring and the cylinder can slide forward against the bushing's spring.



cylinder before and after its horizontal move

Now that the horizontal mobility of the cylinder was achieved, some means to push it forward as necessary was needed. The pawl - or hand - (orange color), attached to the rear of the trigger and used to rotate the cylinder through its engagement with the ratchet also served to the purpose of applying a forward thrust on the ratchet at the end of the cylinder rotation.

When the trigger is pulled - turning around its axis -, a bolt stud (yellow circle) is brought upward until it engages one of the cylinder stop notches on the rear ring of the cylinder periphery. At this precise moment, the cylinder is stopped. Also, a stop notch on the rear edge of the cylinder (yellow arrow on the small photo below) is engaged by the loading gate and that prevents the cylinder from reverse movement. For the cylinder, which is now totally blocked from rotation, the only possible movement is to slide forward when the pawl exerts a thrust on the ratchet. The pawl is first vertically pushed up by the trigger's arm until it reaches the vault of the shield's slot by which it is passes through, and changes its head's vertical movement into horizontal movement against the ratchet (red arrow below). By continuous pressure of the pawl on the ratchet, the cylinder is driven ahead to close the barrel's breech by overlapping.



pawl pushing the cylinder

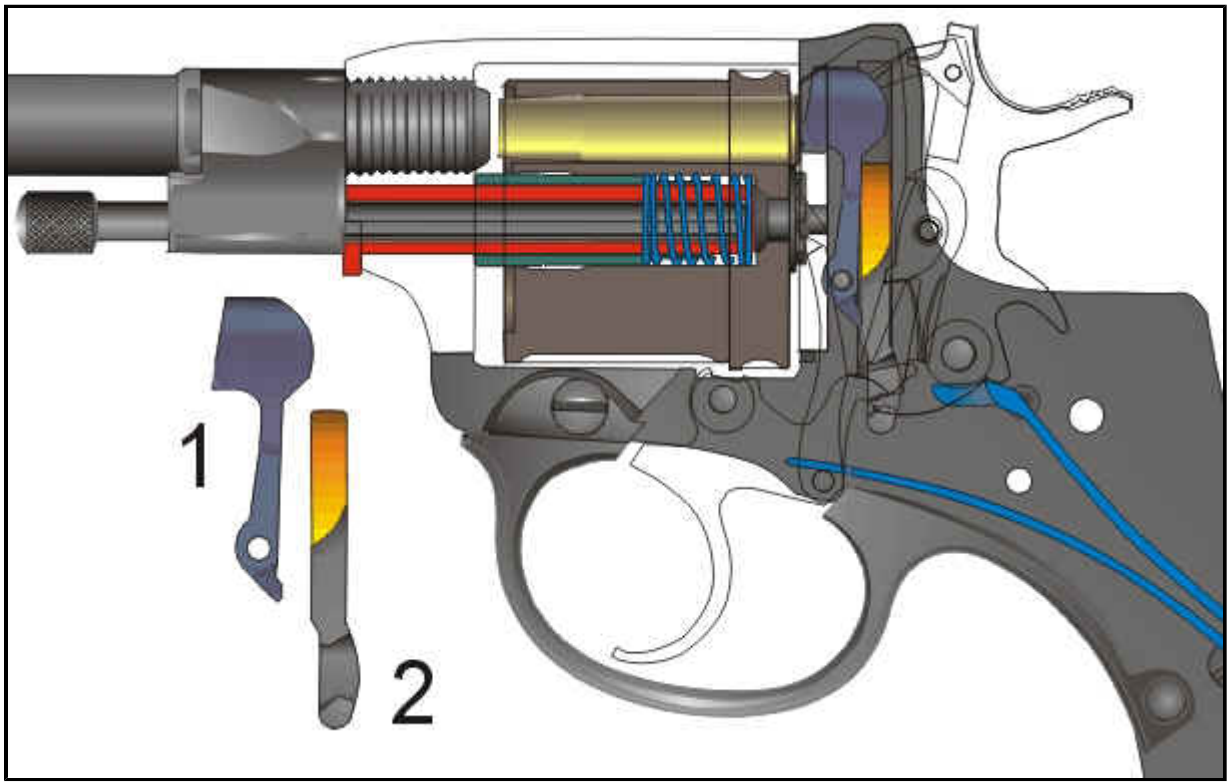
It is understandable that a trigger-pull necessary to overcome both the main spring strength to cock the hammer, and the weight of a full loaded cylinder against its recoil spring adds up to an excessive trigger weight which is quite detrimental to precision when firing in double-action mode.

To effectively move the cylinder at the right time did not solve all of the problems faced. As seen on the sketch below, when the cylinder is moved forward, the cartridge case base is no longer supported by the frame shield (blue circle). If the primer was ignited in these conditions you would have a very dangerous situation with two missiles - the bullet and the case - each flying toward their own opposed direction, with all the damaging consequences that would follow.

Thus it remained to find a device that could effectively support the cartridge's case to be fired, and also somehow create a breech system that incorporated a process of automatic locking and unlocking.

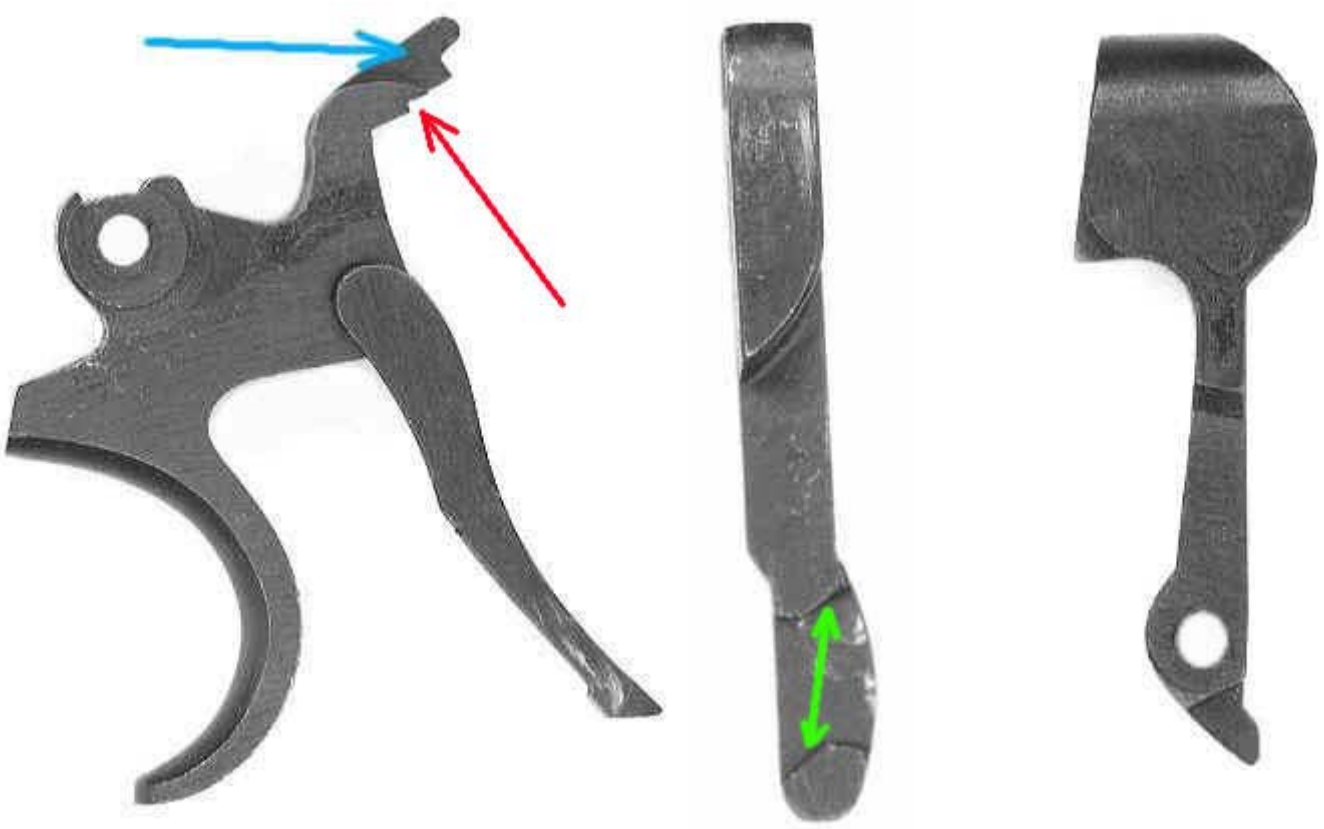
Breech locking of the Nagant Mod. 1895

It is appropriate to say that the revolver Nagant model 1895 had a true breech lock. To add such a device inside a revolver was no doubt a major challenge. First, the whole system had to function without any deliberate action by the shooter and also It had to play its function - supporting of the cartridge case - without notably modifying the weapon's shape or weight. These requirements were perfectly met with the Nagant mechanism.

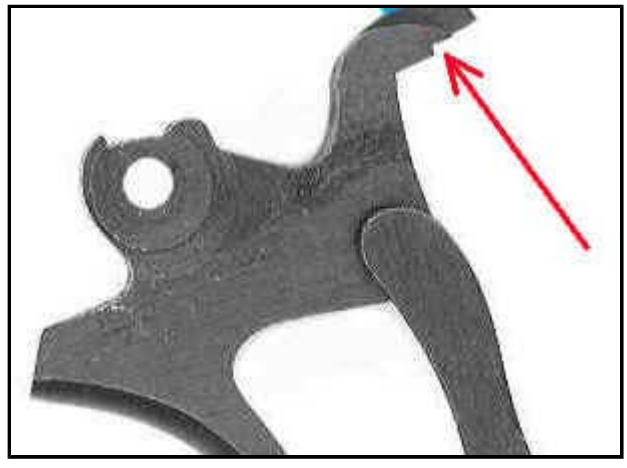


1 : breechblock / **2** : bolt piece

Two parts were designed to play the role of breechblock and breech bolt. The breechblock (1) rotates around a post and is pushed into position by the bolt piece (2) which slides in a vertical track machined in both sides of the frame.

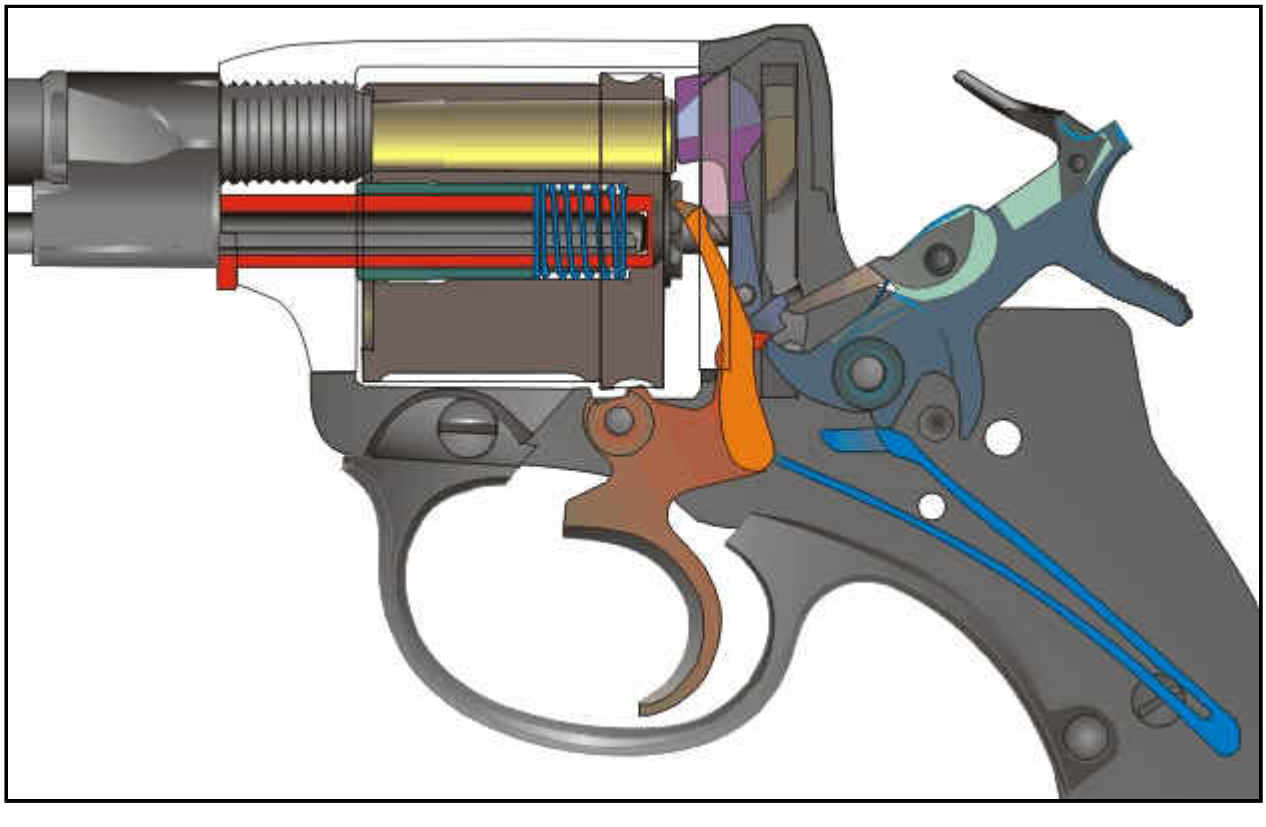


The animated sequence below, shows how the bolt piece is moved vertically up and down by the rear portion of the trigger arm. The tip of the rear portion of the trigger arm itself (see the blue arrow) slides between the two edges (green double arrow) of a machined area in the lower part of the bolt piece. The trigger arm when bearing against the up or down edge pushes up or pulls down the bolt piece. When it slides upward, the bolt's head bears against the breechblock and drive it forward to its foremost position behind the cartridge case.



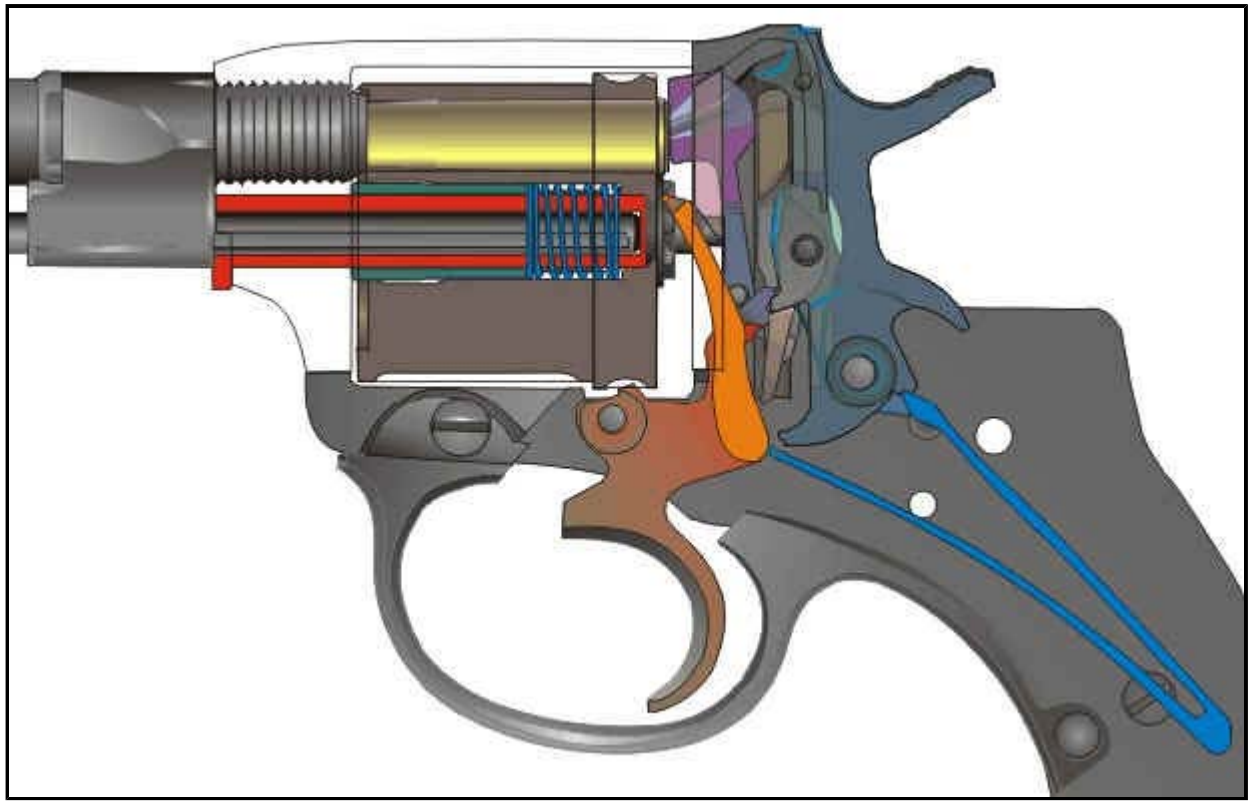
The picture below shows the position of the parts after the hammer was thumb-cocked, and caught by the sear (red arrow here-left), which is an integral part of the rear arm of the trigger.

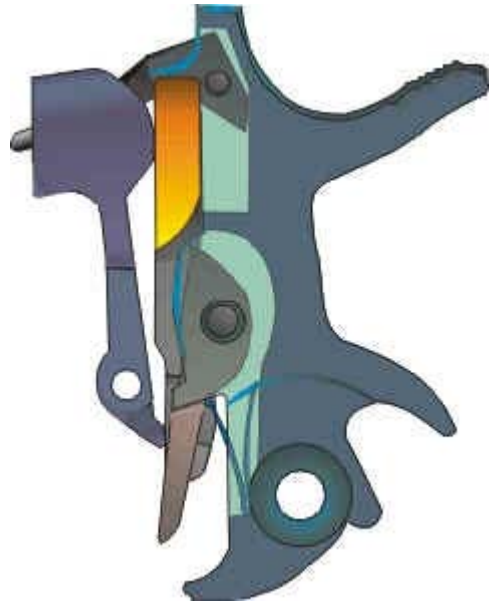
The revolver is fitted with a double-action hammer which has a mobile strut - or catch - screwed on its front face. It is also always possible to shoot using single-action mode by manually cocking the hammer.



parts positions when the hammer is cocked manually

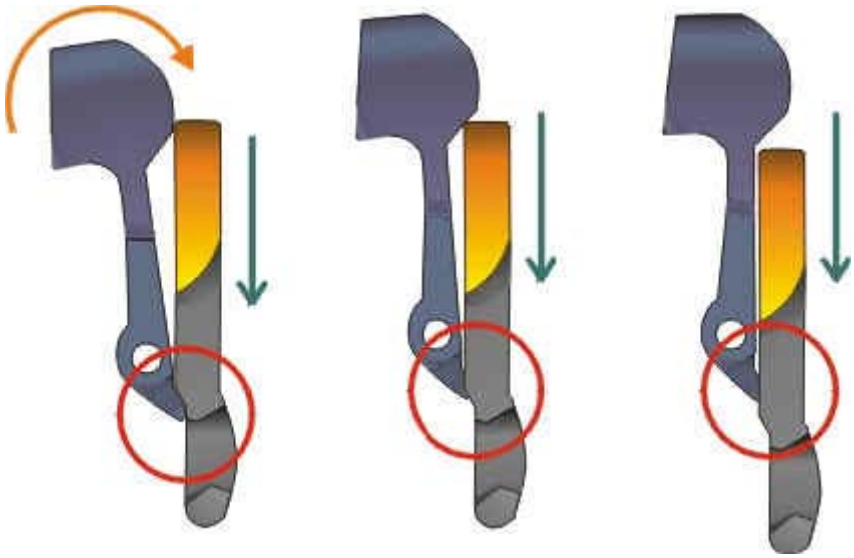
When freed of the sear, the hammer, under the main spring tension, flies toward the case primer. Both the breechblock and bolt piece have an internal hollow space that allows the hinged striker to pass through and at the same time be precisely directed toward the center of the primer.



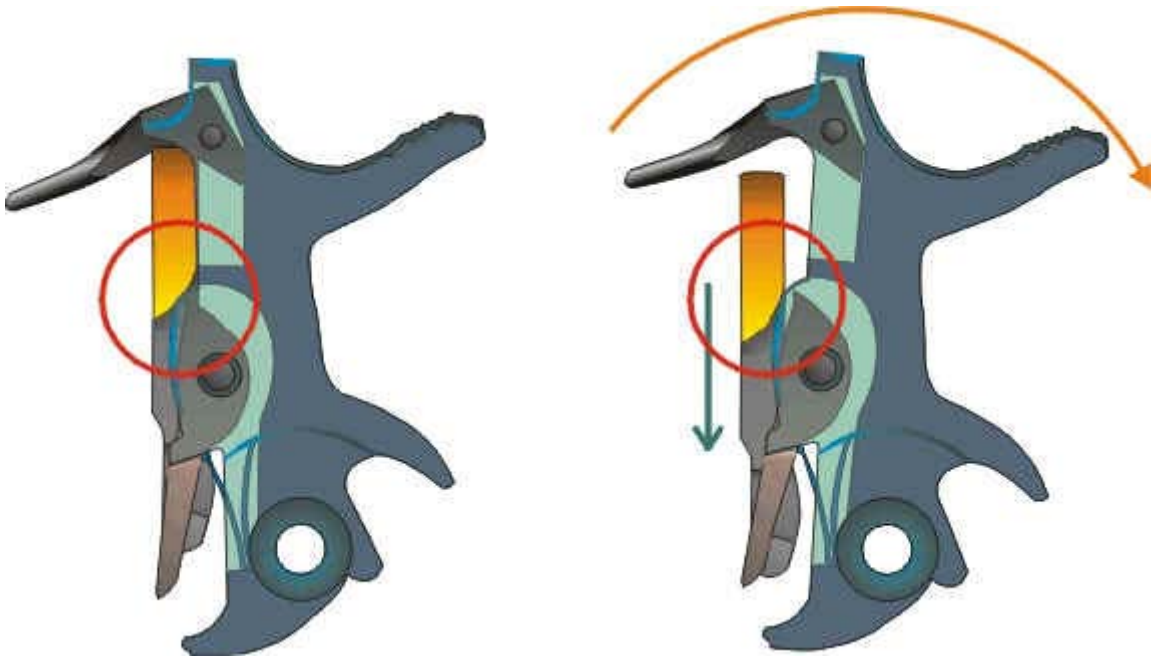


parts positions after the primer striking

When the trigger is brought back by the thrust of the lower main spring limb, the breech bolt piece is also pulled downward. By doing this, it acts on a stud (red circle below) protruding from the lower end of the breechblock and causes the block to rotate back to its original position inside the frame.



The hammer of the Nagant 1895 is of the rebounding type. This means that after each shot, when the trigger is released, the hammer automatically moves backward to a safe position. The goal is to prevent any contact between the striker and a live round when the gun is bore loaded with the hammer down. The automatic move of the hammer occurs through the action of the rounded portion (yellow on the drawing) of the descending breech bolt piece which bears on the breast of the hammer (red circle) and pushes it back.



The Nagant 1895 revolver was available in both configurations with a single-action (Russian production under the Tsarist regime) or a double-action lock. When fitted with a single-action lock, the shooter must manually thumb-cock the hammer. Otherwise, in double-action mode, the hammer is trigger-cocked until it is released by the trigger rear arm. To function as such, a rotating strut has been screwed on the breast of the hammer. Below is an animated sequence to let you understand how that works.

This type of double-action design is found on many other revolvers of different makes and models. Also, a double-action capability does not prevent a shooter from using the gun in single-action mode if that is preferred. It is well known that the latter method is much more precise for target shooting.

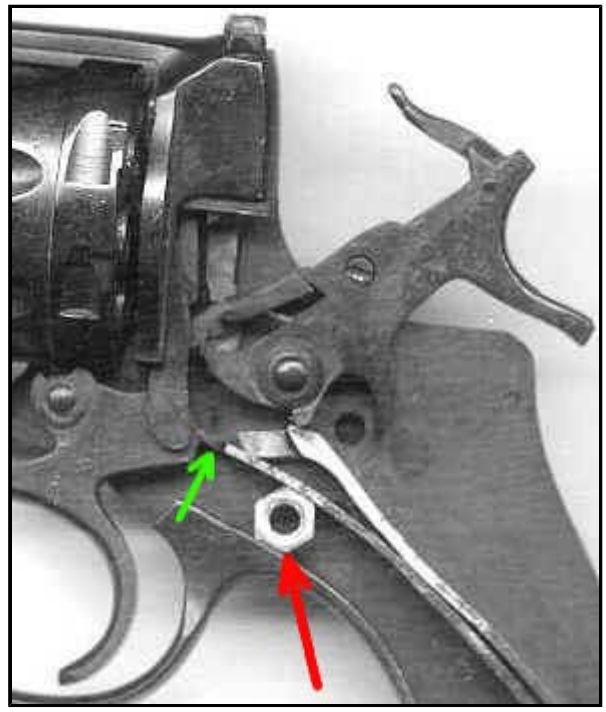
The performance of the Nagant revolver Mod. 1895

Despite its highly sophisticated system which allowed a bullet to gain around thirty meters per second of initial speed, the Nagant 1895 had some major drawbacks to its effectiveness.

One is the tremendous trigger pull weight a shooter must overcome in firing. It involves not only the main spring tension but also the movement of the whole cylinder mass with a full ammunition load, and the cylinder recoil spring tension. This very heavy trigger pull is a serious handicap which badly affects precision when shooting in double action.

Remark : A Russian trick that greatly diminished the trigger pull weight at the start of the trigger pull was to place an 8 millimeters diameter steel cylinder between the lower limb of the mainspring (trigger spring) and the rear extension of the trigger guard. The length of this cylinder must be close to the width of trigger spring. You may also grind the lower limb of a mainspring somewhat thinner ahead of the implanted "spring tension relieving cylinder", but do not overdo it. The Nagant's trigger mechanism needs the high spring power because the trigger spring is also the release spring for the breech bolt.

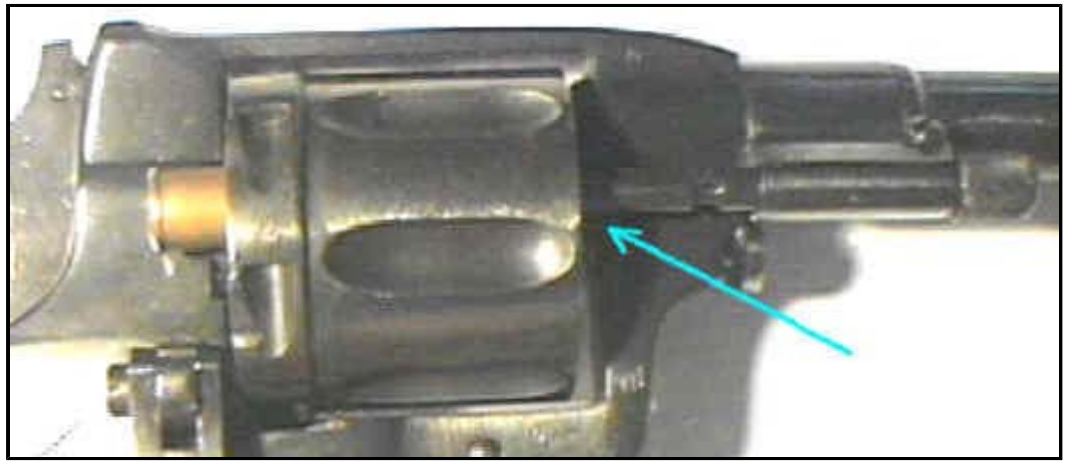
On the picture below a small nut (red arrow) was used instead of a cylinder described in text.



copyright photo : Gunwriters on the Web

Anotherdrawback of the Nagant was the obsolete loading system that was retained. Even if the loading gate principle was in very wide use at that time, the trend was to equip up-to-date revolvers with a side-swinging cylinder combined with an effective collective extractor like the one used in the French model 1892 (picture below), or at least to use a top-break system, like those that fit the old Russian Smith & Wesson service revolver (picture here-left) or some of the English Webley revolvers.

In the Nagant case, every spent cartridge had to be pushed out individually by the ejector rod that pivoted around the barrel. Moreover the rod was even not equipped with a return spring. This obsolete feature for a service revolver made the loading and unloading operation both lengthy and very tedious. Many Russian officers were very happy to keep their old easy-to-load and powerful Smith & Wesson revolvers when fighting against Japan (1904-1905) and even as late as WW I against Germany.



The two pictures show us the unloading process

When it appeared on the scene, the Nagant 7.62 mm cartridge was very competitive to the other small caliber handgun

rounds available. The table below shows the Nagant 1895 and its cartridge compared to a rather similar round of small caliber used in the French service revolver Saint-Etienne 1892. The Russian Smith & Wesson, with its large .44 black powder caliber was an example of the past while the Browning 1900 auto pistol, the first of its kind to be accepted by the Belgian army, was the benchmark for the future.

These data come from : Les armes de poing des deux guerres mondiales by M.H. Josserand

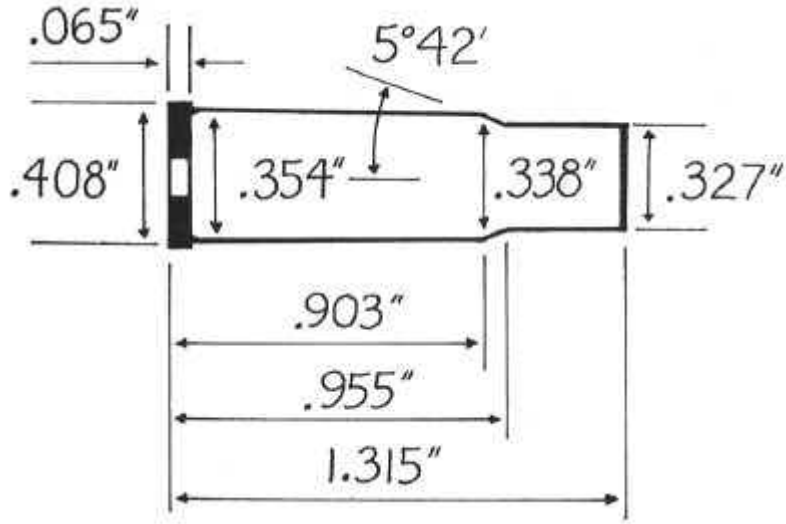
Handguns	S&W Russian	Nagant 1895	St Etienne 1892	Browning 1900
Lock system	Simple-action	SA and DA	DA	Semi-auto
Tot. length	320 mm	234 mm	239 mm	163 mm
Barrel length	178 mm	114.5 mm	117 mm	102 mm
Weigth unloaded	1,170 g	780 g	840 g	615 g
Rifling	5, right	4, right	4, left	6, right
Rifling step	508 mm	240 mm	240 mm	240 mm
Capacity	6 cartridges	7 cartridges	6 cartridges	7 cartridges
Ammunition				
Name	.44 S&W	7.62 Nagant	8 mm Mle 92	7.65 Browning
Tot. length	35.6 a 36.2 mm	38.8 mm	36.5 mm	25 mm
Case length	23.5 a 25.5 mm	38.8 mm	27.2 mm	17.2 mm
Total weight	21.3 a 22.0 g	12.3 g	12.0 a 12.5 g	7.85 g
Bullet weight	15.9 g	7.0 g	7.85 a 8.0 g	4.75 g
Powder weight	1.49 PN	0.53 SF	0.75 PN / 0.30 Tbis	0.20 SF
True caliber	10.7 a 11.2 mm	7.8 mm	8.2 mm	7.9 mm
Ballistic				
Initial speed	230 m/s	**300 m/s**	225 m/s	270 m/s
Energy	43 kgm	32 kgm	20 kgm	17.5 kgm
Stopping Coeff.	40.4 Stp	15.5 Stp	11 Stp	8.4 StP
Perfor. Coeff.	45.7 Perf	66 Perf	37 Perf	35.6 Perf

Regarding pure ballistics, one can consider the Nagant cartridge to be a very effective one when compared with its challenger that was used in the French service revolver.

For those who have recently acquired a cheap Nagant 1895 for shooting purposes, it is not very easy to find cartridges for them. Even if the Italian firm Fiocchi still produces them their price is prohibitive. You sometimes can come across an original Russian box of cartridges, but most of the time you will not find many of these scarce rounds in the regular market.

Regarding reloading possibilities, other than using the .32-20 Winchester cases as explained below, new Boxer type cases might be available through the Australian firm Bertram.

Here is a step-by-step explanation of how to use the .32-20 Winchester case for reloading.



.32-20 Winchester case

1) To make ammo for the Nagant revolver, you must begin with .32-20 Win. brass. This brass has about the same head diameter as the standard Nagant cartridge, but it has a shorter length, so you won't get the gas seal. It will work like an ordinary revolver load.

2) You'll need a set of .30 M1 Carbine dies and a .32-20 shell holder. The M1 dies have about the same dimension as the Nagant cartridge.

3) Begin sizing the brass in the .30 M1 Carbine sizing die. This will remove the slight shoulder of the .32-20 and give it a tapered, straight wall shape.

4) Now primer the cases as usual, and load with 3.5gr of Red Dot gunpowder. I find this load to be consistent and clean burning. Use .32 H&R Magnum load data as a starting basis for Nagant reloads.

5) For the bullets, use a diameter of .310 to .312 to fit the cases tightly. Bullet weights should be 90 to 110 grain range of any style.

6) There are two ways to seat and crimp the bullets so that the cylinder will revolve. The first is to fully seat the bullet into the case so that the top of the bullet is flush with the case mouth. Then finish with a heavy roll crimp to bevel the case mouth. The second way involves trimming the case down, so that when the bullet is seated and crimped in it's crimp groove, the overall length of the finished cartridge is short enough to allow the cylinder to rotate.

Source : http://users.desupernet.net/~roo67/index.htm

bullet positions in the case

Bibliographical and pictures sources :

- Revue Armes & Tir no 8 (October 1999)
- Les armes de poing des deux guerres mondiales by M.H. Josserand
- Cartridges of the World by Frank C. Barnes
- site : http://users.desupernet.net/~roo67/index.htm

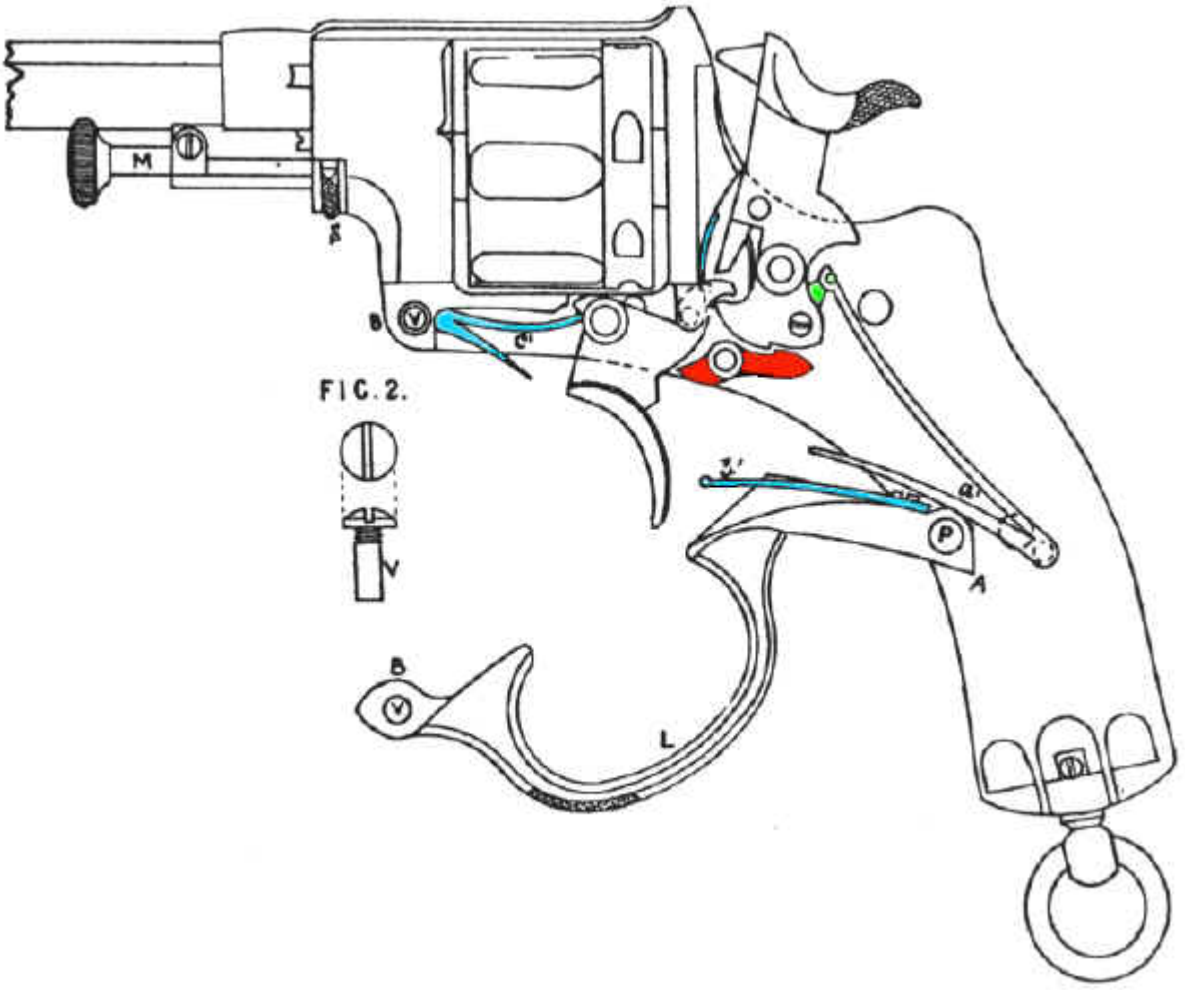
The Nagant revolvers of the Belgian Army

By 1878, the Belgian Army adopted for the first time a revolver to be issued to its officers. It was the first "pure" Nagant revolver that was wholly designed - and produced - by the firm. This weapon, later adopted with variations by many other countries, gave birth to a handgun family among which the most famous member was and still is the model 1895 that was adopted - and produced in vast quantities - by Russia.

The Belgian Army Nagant revolvers bore specific markings. Among those was a crowned intertwined double "L" inside a circle, standing for King Leopold II. This Royal marking was struck on the left side of the frame above the handle. Another military marking, a crowned "LH", was applied on the narrow front panel of the frame by a military inspector. Also present was a specific military proof marking represented by the EGB logo over a star inside an oval.

The model 1878 that is shown below was of solid frame type, bearing a classical ejector rod hanging under the barrel by means of a sleeve rotating around the barrel base. When unused the rod was slid and bolted in a rest position inside the cylinder axis. An easy access to the whole lock mechanism was provided by a removable plate on the left side of the weapon. This plate was retained by a large screw visible at the top edge of the right wood stock. A letter "A" near this screw indicates the start of the takedown procedure. Each part of the lock mechanism was marked with a letter to tell the user how to dismount it in an ordered way.

An ingenious system allows the user to release the main spring tension by merely turning down the trigger guard. Such practical thinking and design is typical of efforts to gain the favor of military customers who are inclined to choose weapons readily stripped without the help of tools that could be lost in the field.



Nagant Model 1878 patent's drawing

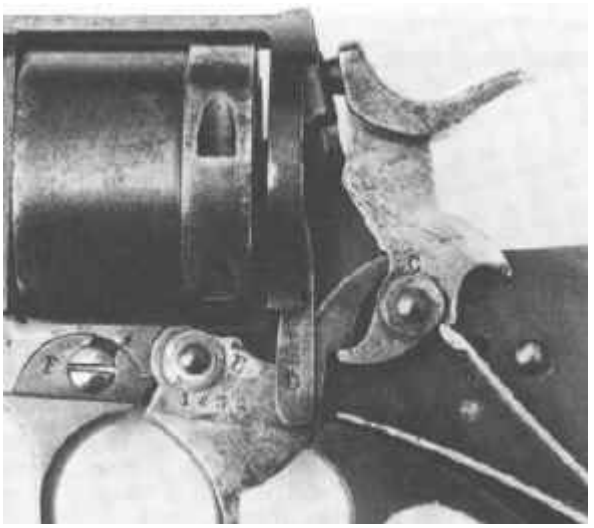
Nagant Model 1878 - cal. 9.4 mm - © B&B

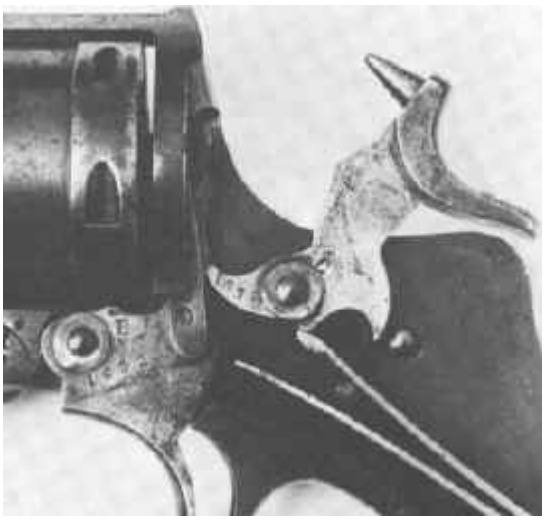
Internal mechanism of the Nagant Model 1878 - © B&B

The model 1878 shown here was chambered for the 9.4 Nagant cartridge. The lock mechanism was of double-action (trigger cocking). As most revolvers of the same period it included a lot of parts and springs. The sear for example was a separate part with its own return spring (colored in red on the patent drawing above).

Munitions 9.4 mm Nagant de gauche a droite :
- Sociйtй anonyme de Bruxelles
- SA (Stй d'Anderlecht)
- SFM Stй franзaise de Munition

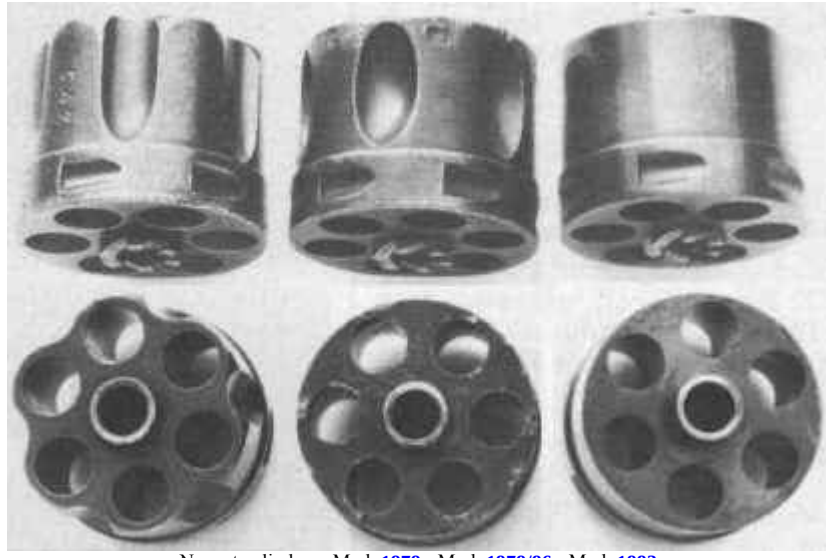
In 1883, a new cheaper Nagant model was used by the Belgian Army. The cylinder periphery was plain, without the usual lengthwise flutes, and the lock was of single-action type as shown in the two pictures here (the hammer must be thumb-cocked for each shot). Also, the hammer was of rebounding type. In the picture on the left, the hammer is positioned slightly rearward when the trigger is released.



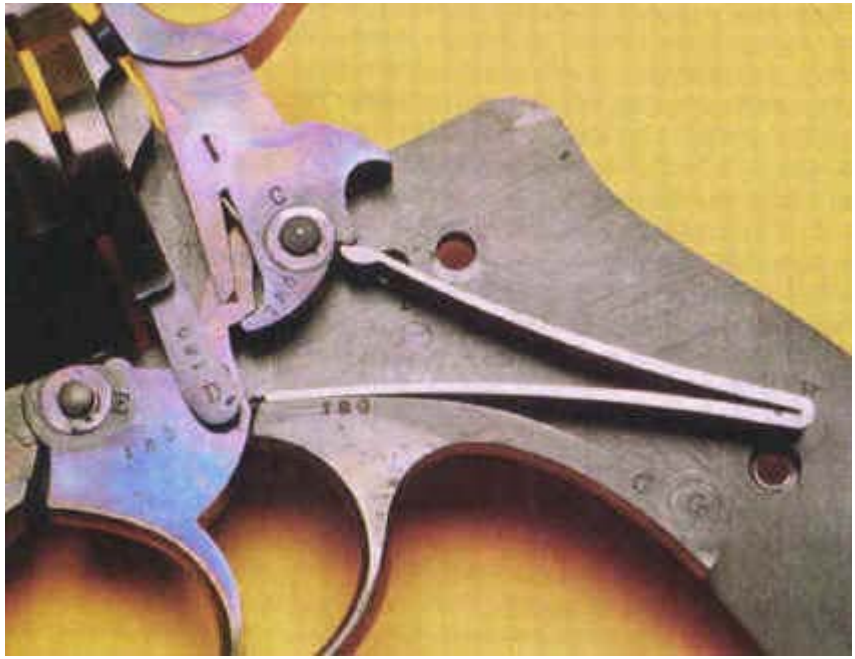


Nagant Model 1883 - cal. 9.4 mm - © B&B

In 1886, a new model known as the 1878/86 appeared on the scene with the same simplified action as in the model 1883 but with a double-action lock. If we compare this new model with the patent's drawing of the model 1878 shown before, one can see that all the colored parts on the drawing - five parts - were suppressed (sear, sear spring, forward trigger spring, pawl spring and hammer stirrup). The lower limb of the main spring was used to action both the trigger and the pawl (struck with a letter "D" on the picture here below). The pawl's axis was machined in such a way that when the main spring lower limb tip bore on it, the pawl was forced forward.



Nagant cylinders : Mod. **1878** - Mod. **1878/86** - Mod. **1883**



Simplified double-action lock of the model 1886

Nagant Model 1886 - cal. 9.4 mm - © B&B

Beside the model 1886, a new model 1883 with the 1886 type double-action lock was also available but it retained its current unfluted cylinder.

Nagant Model 1883/86 - cal. 9.4 mm - © B&B

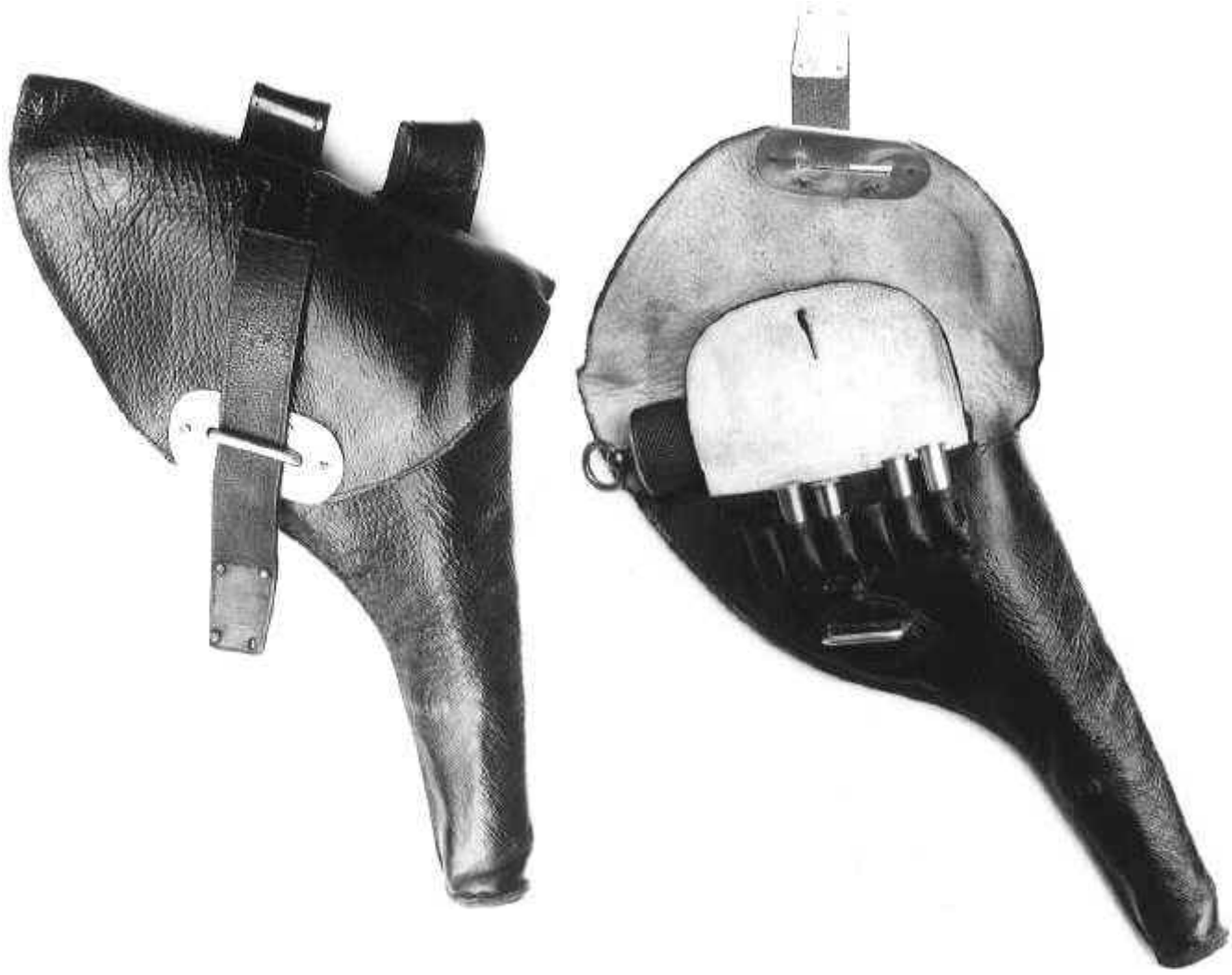
Belgian Army revolver holsters

The only revolvers used by the Belgian Army were Nagant models 1878, 1878-86 and 1883. The holsters for these guns were of two types : The Civic Guard models and the models worn by senior and junior Army officers as well as mounted battery drivers.

The difference between the Civic Guard and the Military holsters is a matter of assembling quality and the leather chosen with or without internal soft lining. Civic Guard holsters were made of soft flexible and glossy leather lined with buckskin. Military holster were made of coarse very rigid leather with matt or glossy finish, not lined and stitched with strong threads. These Military holster, made by private firms, were verified on delivery by army inspectors as to their conformity with the service requirements. It seems that these revolver holsters did not carry any producer markings while pistol holsters on the other hand generally had those type markings. A common feature of all the Belgian revolver holsters was the presence of a six-round (cal. 9,4 mm) pouch. It must be noted that there was no provision to store the screw driver in the holster. As to their color, all were black.

Model 1

A Civic Guard holster for the Nagant Mod. 1878 and 1878/86 was made of soft leather lined with light colored buckskin. The whole piece was finely stitched. The ammunition pouch flap was fastened by a leather button. The holster was closed with a flap which was held in position by a leather strap (ending with a metallic insert) that slid through a fixed buckle that came up through a slot in the flap. The holster had a large belt loop for use in wearing it at the waist and the belt loop had a semi-circular cutout for fastening it to a baldric.

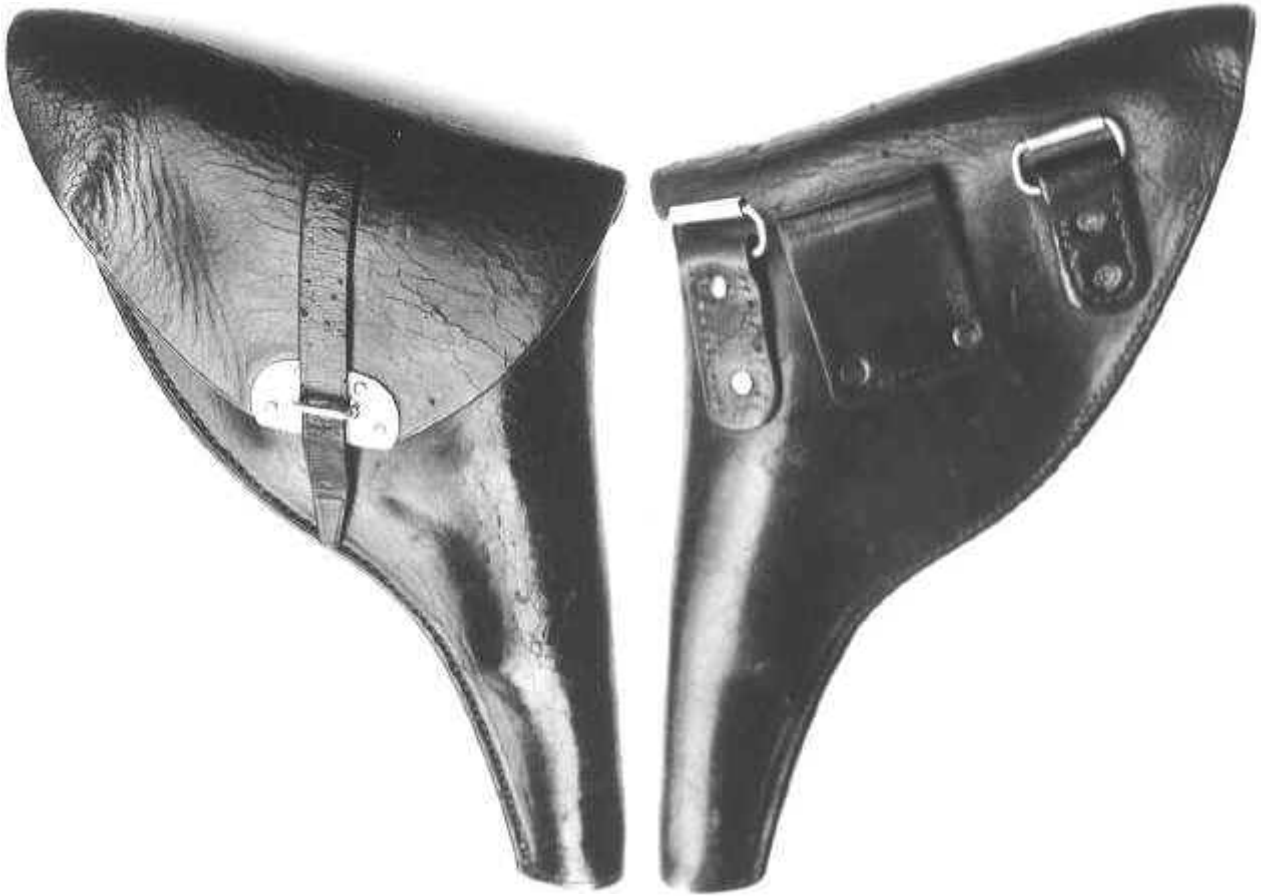


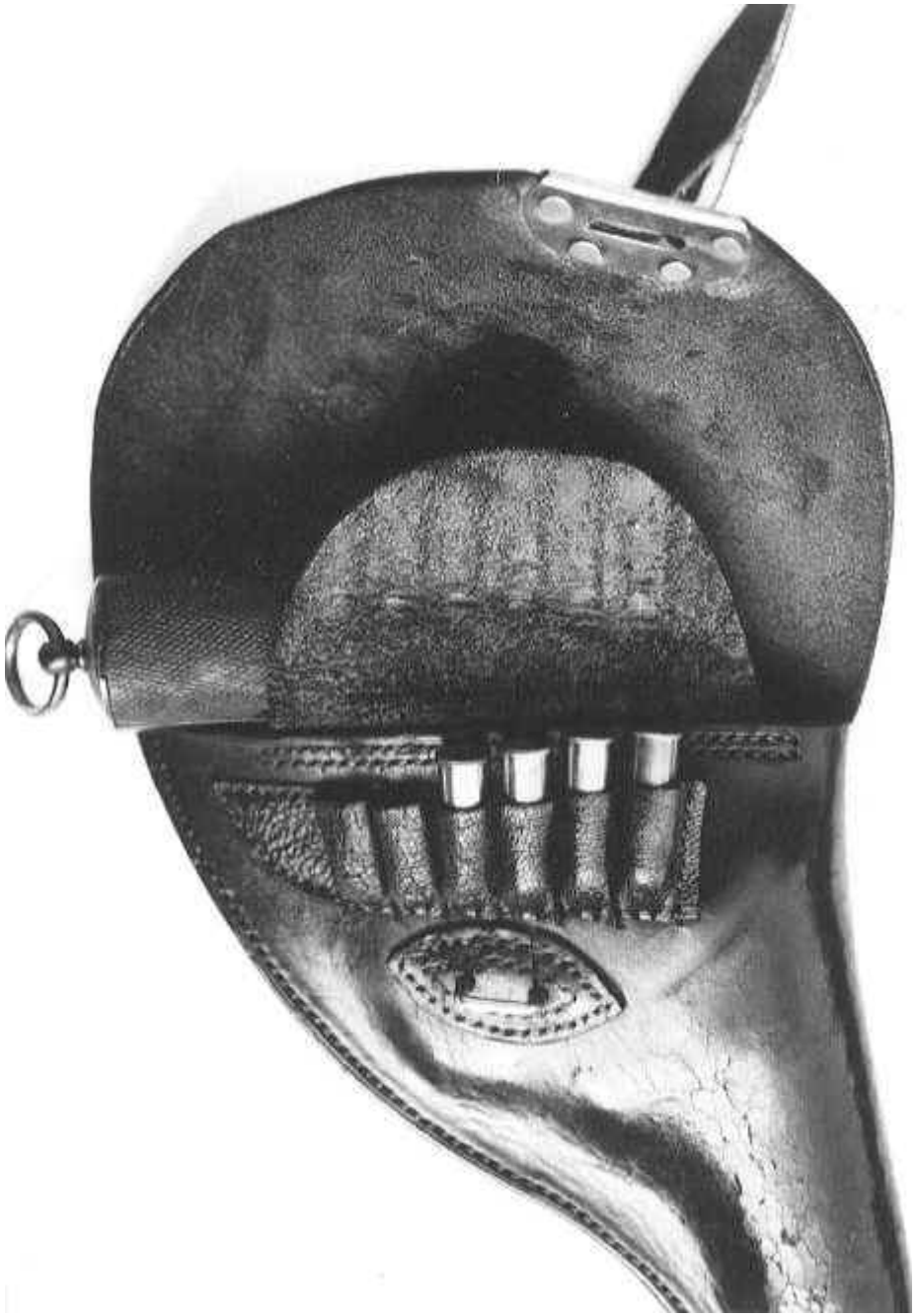
Model 2

A holster for prison guards - revolver Nagant caliber 7,5 mm - was made of soft leather lined with light colored buckskin. The ammunition pouch flap was folded down and not fastened. A piece of lacing was attached to the inside of the pouch at the trigger guard level and it extended to the outside of the holster. Pulling on the lacing made it easier to lift out the revolver. The closing system of the holster was similar to the model 1 system.

Model 3

This holster, for models 1878,1878/86 and 1883, was for Army officers and later for mounted artillery drivers as well. They were made of tough unlined leather and stitched with strong thread. The closing system was the same as the other models but the retaining strap was narrower and the tip was not reinforced with a metal insert. The flap of the ammunition pouch was also just folded over to close the pouch. The belt loop was reinforced by two rivets and two buckles which allowed the holster to be worn with a baldric.



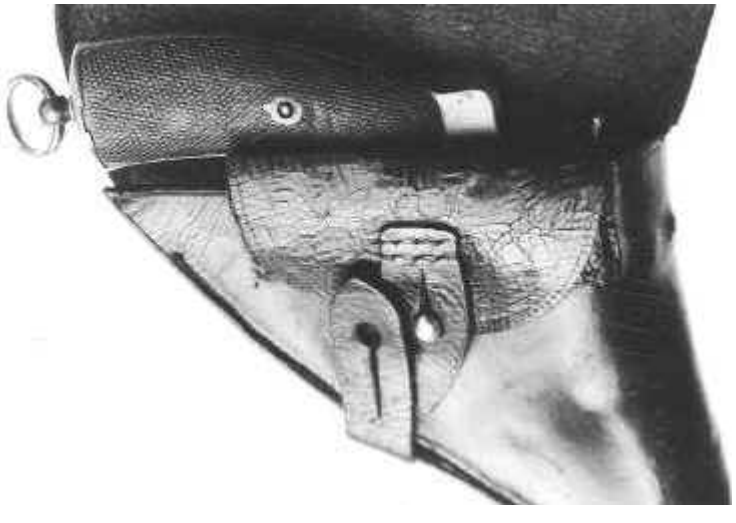


Model 4

This holster, for models 1878,1878/86 and 1883, was also for Army officers and later for mounted artillery drivers. They were made of tough unlined leather and stitched with strong thread. The closing system was the same as previously described but the retaining strap had a metallic insert at the tip. Also, the ammunition pouch flap was fastened by two square buttons of leather. The pouch was lined with buckskin. The holster was worn with the use of a large belt loop with a semi-circular cutout for wearing it with a baldric.

Model 5

This holster, for models 1878,1878/86 and 1883, was for Army officers and junior officers of the mounted artillery and train regiment. They were made of tough unlined leather and stitched with strong thread. The holster's flap was closed with the use of a strap, coming from below, with a slot cut in it that was fastened over a brass stud on the flap. The back side of the brass stud is seen in the upper left picture of this model. The ammunition pouch flap was secured with a strap attached to its flap that also had a slot cut in it and which fastened over a brass stud on the holster. The ammunition pouch was entirely lined with buckskin. The holster was worn with the use of a large belt loop with a semi-circular cutout for wearing it with a baldric.



Bibliographical and pictures sources :

- Belgian revue **AMI** no 33 (June 1982)

The Nagant revolvers of the Grand-duchй of Luxembourg

During the 1880's, the armed forces of Luxembourg were composed of just 500 men, split equally between the Army and the Gendarmerie. This whole but very small "Army" was equipped with Remington-Nagant rifles and muskets furnished by the Belgian Nagant firm. It was thus quite natural that the authorities of Luxembourg turned toward the same firm when the need arose for new handguns.

By 1884, and based upon the request of some officers of the Luxembourg Army, the Nagant firm made up some small 7,5 mm caliber revolvers. That caliber was already in use by the Swiss army which was equipped with the Schmidt mod. 1882 revolver. The new Nagant revolver was externally very similar to the 1887 model but it included the simplified action that would be found some years latter in the Swedish 1887 model. On this new model the ejector rod had a lengthier, slimmer, checkered head, and the front sight was of rectangular shape instead of the usual half-moon. These first small caliber Nagant revolvers would realize a continued success as they would be adopted some years latter (1887) by the Swedish Army as their service revolver.

The Army and Gendarmerie of Luxembourg used three different models of Nagant revolvers :

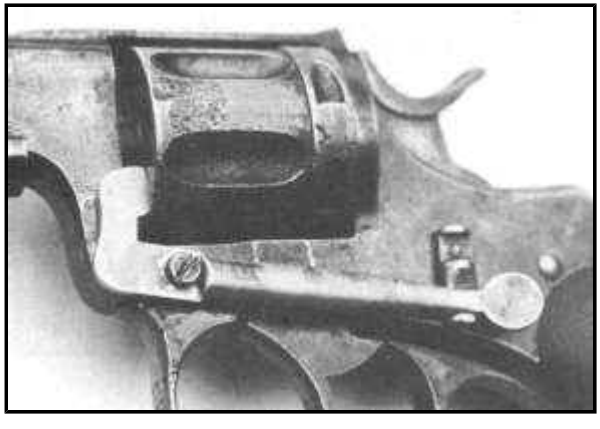
- The first one, named "Model 1884 for officers" is shown below. It was identical to the one latter adopted by Sweden. In 1893, Norway was also equipped with the same model but with a notched front sight (see the next picture).

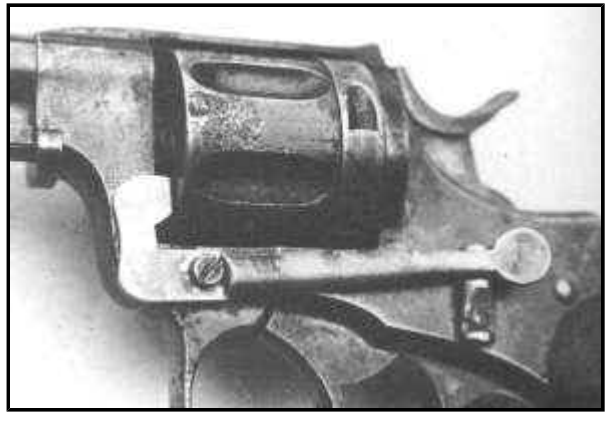
Mod. 1884 - cal. 7.5 mm - © B&B

- The second model, named "Model 1884 for officers with safety" was fitted with a safety device which locked the cylinder when applied. The same model was adopted by the Belgian Ministry of Justice to equip prison guards.

Model 1884 with safety - cal. 7.5 mm - © B&B

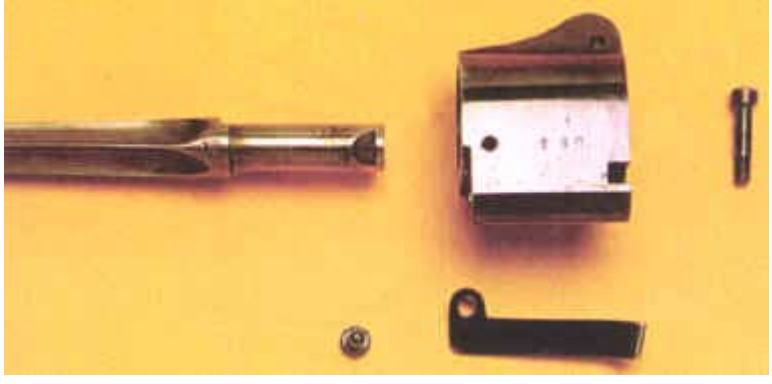
Following the rule which obliged one to shoot two times with blank cartridges before using true round-loaded ammunition, this safety system was devised to allow the cylinder to be locked in a position so that the two blank cartridges were the first to be struck after the safety was released. As seen in the two pictures here, it is merely a lever whose front arm engages a cylinder chamber when the safety is on.





- The third model was named "gendarme revolver or Model 1884 for gendarme". It was a 1886 model fitted with a double-action simplified lock but the cylinder was plain (not fluted) as on the Belgian 1883 model. The caliber for this model was the 9.4 mm Nagant. A special feature of this model was the barrel length which was 20 mm longer. The front sight shape also was different but the rod ejector remained the same as those on the other small caliber models (The Belgian Army 9.4 mm models were equipped with a different ejector rod).

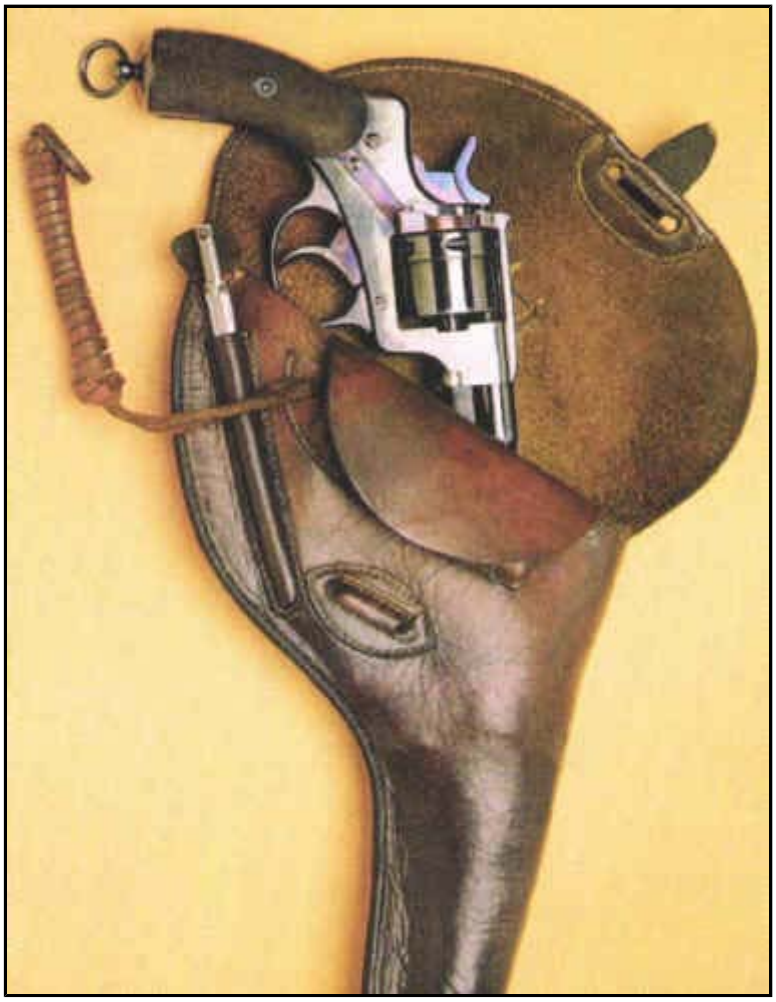
Nagant Model 1884 for gendarme - cal. 9.4 mm -



Another special feature of this model was the possibility to add to it a removable bayonet, slid in a sleeve, and retained by a spring blade bearing a lock stud. The sleeve was attached at the end of the barrel and held in place by a screw behind the front sight. It could remain permanently attached. The bayonet blade, of 10.5 cm long, had a cross section. It could be removed by lifting the spring blade retainer.

The reason for the unusual barrel length was to allow the ejector rod to be pulled out fully with the bayonet holder attached. The revolver was put on the commercial market around 1890 and met with fairly good success among target shooters who appreciated the precision that could be obtained with the longer barrel.

The whole kit included a leather holster that could hold the revolver with the bayonet holder installed on the gun. A long cylindrical pocket stitched near the ammunition pouch was also provided to store the bayonet.



The 9.4 mm cartridge brass case had a 9.85 mm internal diameter, a length of 20.8 mm and the rim diameter was of 12.35 mm. The powder (very fine black powder) charge was of 0.8 g. The lead bullet measured 18.55 mm long by a diameter of 9.90 mm. The bullet weight was 12.60 g. These specifications are quite similar to those of the Belgian Army revolver cartridge in the same caliber.

As the Grand-duchй of Luxembourg was very tiny European country, and did not possess a proof house or any local place to make a valid firearm proof-test, it is not unusual that the revolvers did not have any specific related markings. Only an upper-case letter "L" is found along with the serial number inside the handle (visible when the grip stocks are removed). This letter "L" is the only clue to identify the Nagant revolvers furnished to Luxembourg.

Table of the different Nagant revolvers of Luxembourg

Caracteristics	Mod. 1884-87 officer	Mod. 1884-87 safety	Mod. 1884-87 Gendarme
Total length	236 mm	236 mm	285 mm
Barrel length	92 mm	92 mm	131 mm
cylinder type	with grooves	with grooves	unfluted
capacity	6	6	6
Caliber	7.5 mm	7.5 mm	9.4 mm
type of lock	SA + DA	SA + DA	SA + DA
Particularities		cylinder safety	removable bayonet

The Nagant revolver of Sweden

By 1863, Sweden had purchased for its artillery 1,065 Lefaucheux pin-fire revolvers in caliber 11 mm which were similar to those already in use in the French Marine. From 1879 onward, most of these revolvers were converted to use center-fire cartridges of 11 mm that were compatible with the last-adopted revolver, the Lefaucheux-Francotte (third picture)

Lefaucheux Mod. 1863 - cal. 11 mm pin-fire - © B&B

Lefaucheux Mod. 1863/79 - cal. 11 mm center-fire - © B&B

On April 19, 1871, the Swedish Army adopted the 11 mm caliber center-fire double-action revolver Lefaucheux-Francotte. The majority of these guns were manufactured by the firm Auguste Francotte from Liиge (Belgium), with the balance being produced by the Swedish firearms maker Husqvarna Vapenfabrick.

Lefaucheux-Francotte Model 1871 - cal. 11 mm center-fire - © B&B

By 1884, the Swedish Marine selected the French revolver Saint-Etienne model 1873 under the name of Model 1884.

revolver Saint-Etienne model 1873 - © B&B

From 1885 on, a Swedish Army commission began an investigation to find a new revolver to replace their model 1871 Lefaucheux-Francotte. After technical tests were made with revolvers such as the Austrian Gasser-Kropatschek model 1878, the Swiss Schmidt model 1882, the Belgian Nagant model 1878 and another Belgian revolver proposed by the firm Warnant, the commission retained the Belgian Nagant and the Swiss Schmidt for further tests. The Belgian Nagant was the winner of these complementary tests. The first purchase orders went to the Belgian firm but by 1897, the Swedish firm Husqvarna started the national production. The first 350 Husqvarna revolvers were sent to Norway which was united with Sweden at that time.

model 1887 built up by Nagant - cal. 7.5 mm -
to be sold for $495 : http://www.collectiblefirearms.com

From 1898 to 1905, the firm Husqvarna turned out 13,732 Nagant revolvers for the Swedish Army. Each was delivered with a holster, a spare cylinder, a cleaning rod and a screw-driver. A small quantity was also offered on the commercial market.

model 1887 produced by Husqvarna - cal. 7.5 mm -
to be sold for $435 : http://www.collectiblefirearms.com

From 1907 on, the Swedish Army started to replace its Nagant revolvers with a semiautomatic pistol model 1907. That pistol, produced by Husqvarna, was in fact a copy of the Belgian FN Browning pistol model 1903 in caliber 9 mm Browning long.

model 1907 (1903 FN Browning) - Cal. 9 mm Browning long -

Bibliographical and pictures sources :

- Catalogue Butterfield & Butterfield A44 - Sale Rolf H. Mьller - December 1994
- Handguns of the World by Ezell

The Nagant revolver of Serbia

The Serbian Principality ordered Belgian revolvers for the first time in 1871. It was the Francotte model in 11 mm caliber. As early as 1875, Serbian senior and junior officers of all arms were provided with a revolver as a side-arm.

revolver Francotte 11 mm - © B&B

In keeping with the standard practice of that time, the officers were allowed to obtain their own handgun from any commercial firm. Some of them acquired Autrian Gasser revolvers that looked like the official Francotte model while others turned toward the Chamelot-Delvigne design used in France. The authorities became rather uncomfortable with the variety of weapons being purchased, and to resolve the situation they decided to adopt a unique regulation handgun.

revolver Gasser - © B&B

revolver Chamelot-Delvigne - © B&B

By 1890, an official commission based in Belgrade was charged with examining the various revolvers produced by European and American firms. The recent decision by Sweden to purchase the Nagant model 1887 in calibre 7.5 mm drew the attention of the commission.

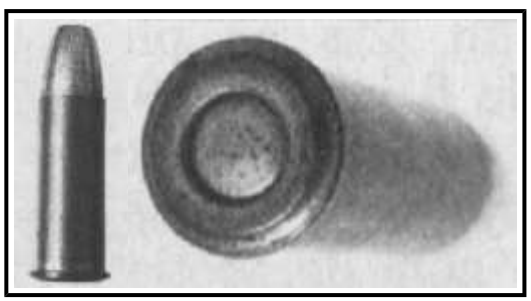
After a series of tests at the shooting gallery of Banjica, the commission which was leaning towards the Nagant revolver of small caliber, chose it, but some modifications in the design were asked for by the Ministry of War. On July 8, 1891, the Nagant was adopted under the name of Model 1891.

Serbian Nagant Model 1891 - © B&B

A contract was signed for an order of 12,000 revolvers with accessories and ammunition. Those guns were to be issued to the troop, and reserve officers. Regular officers had to personally procure the same model at their own expense.

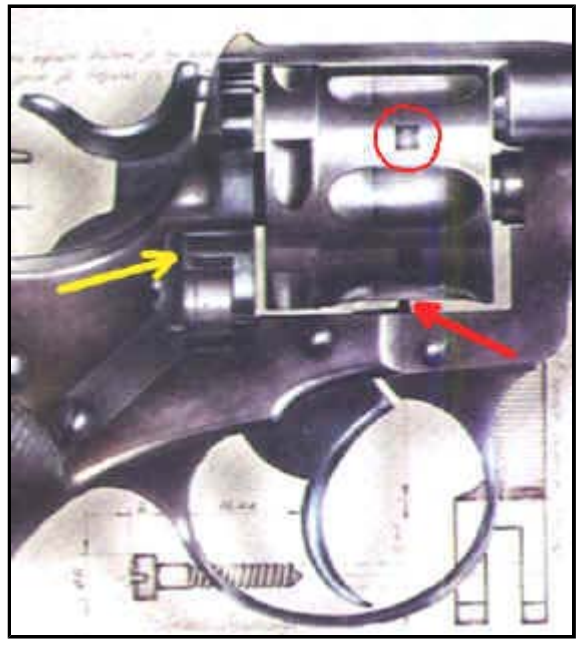
The firm Nagant immediately started production and the first deliveries began the following year. The total delivery was completed by 1898.

One regulation dated February 4, 1895, defined the holster's characteristics. They had to be made of leather with an ammunition pouch for 15 cartridges (7.5 mm). The Military plant of Kragujevac was first given the holster production and then was asked to produce the ammunition. By 1896, Kragujevac production had reached the figure of one million cartridges per year.

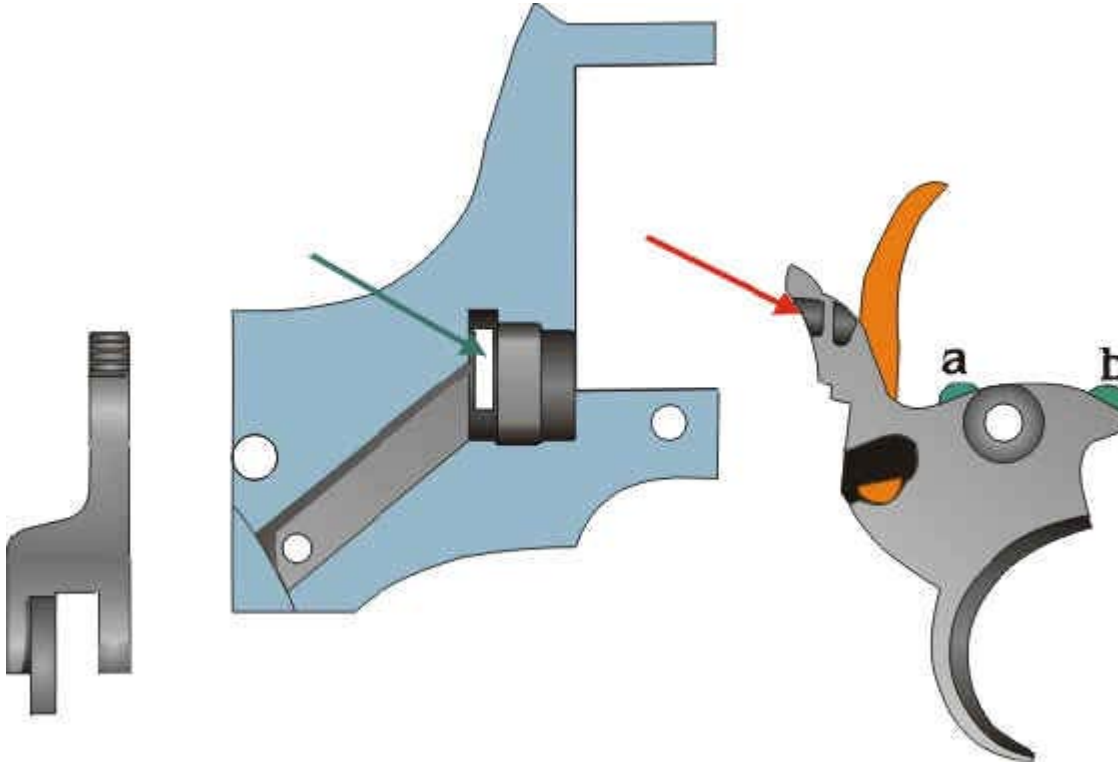


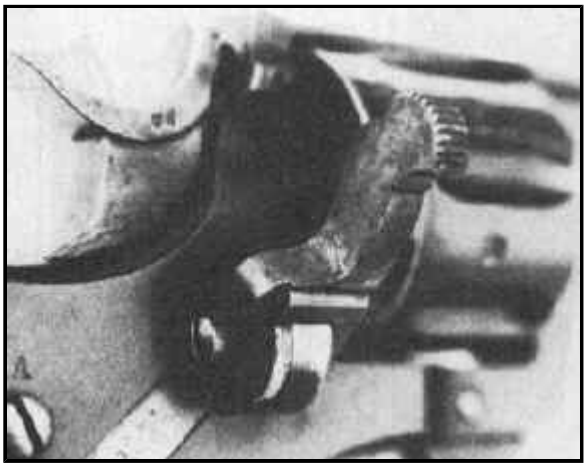
Specific features of the Serbian Nagant revolver.

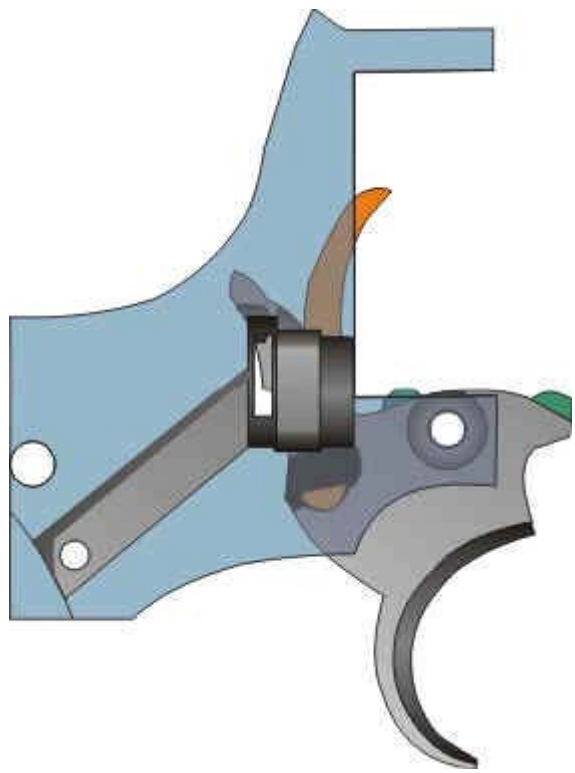
The Serbian Nagant M1891 was very similar to the Swedish M1887. It enclosed a double-action lock, bore a screwed on octagonal barrel and the cylinder surface was grooved. It also had some special features such as an additional bolt notch (red circle) at the middle-length of the cylinder and the loading gate (yellow arrow) which acted as a safety.



The cylinder locking on this revolver works in the following manner : When the trigger is depressed and pulled to its rearmost position, the trigger stud referenced as "a" on the drawing reaches the apex of its arc and engages one of the stop notches running on the periphery of the rear cylinder's ring. One of the chambers is then perfectly aligned with the barrel. When the trigger is fully released, its front stud referenced as "b" engages the stop notch on the median position (red arrow). So, in both positions of the trigger, fully depressed or released, the cylinder remains locked.

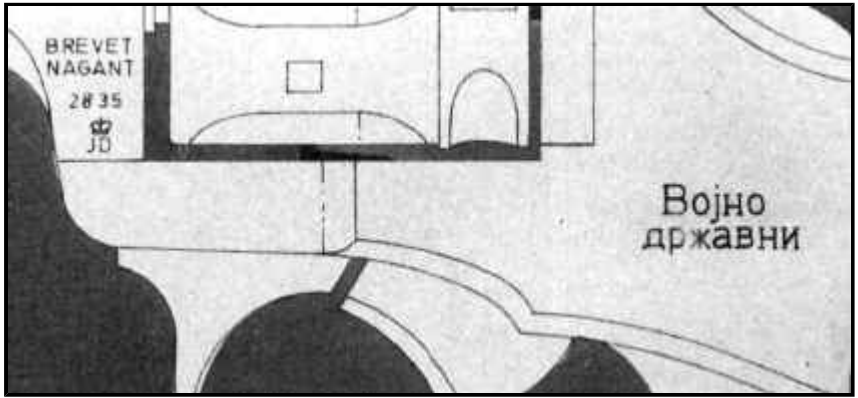






The loading gate safety is activated or released by the movement of the loading gate lever. The lever has a notched ring that passes through an opening machined in the frame wall (green arrow on the first drawing above). When the gate lever is lowered to start the loading procedure, the lever ring notch engages, by rotation, a groove that is machined on the rear arm of the trigger (red arrow) and immobilizes it as a consequence. By the camming effect of the ring notch sliding inside the groove, the trigger is made to stop in such a position that the front stud (b) is disengaged from the cylinder middle stop notch without having the rear stud (a) reach its uppermost position and block the cylinder with one of its rear stop notches. As a result, the cylinder is free to rotate while the trigger is locked. The loading operation then becomes safe with no possibility for the trigger to act upon the hammer.

All the Serbian Nagant revolvers bear on the left side of the frame the words : "Military - State" in Cyrillic letters. At the front panel of the frame the patent reference "BREVET NAGANT" patent reference, the serial number and an inspector marking are struck. On the right side one can find a crowned letter "R" under a star standing for the proof test of Liиge.



The Serbian revolvers were black finished throughout, with the exception of some parts like the loading gate spring blade, the loading gate itself, the hammer, the ejector rod and various screws that were blued.

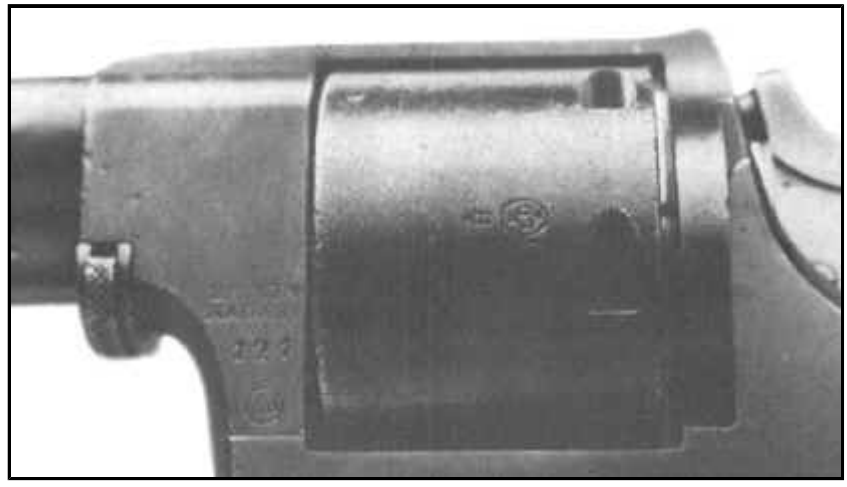
Bibliographical and pictures sources :

Belgian revue AMI no 66 (july - Aug. 85) Le revolver Nagant Serbe Modиle 1891 by Branko Bogdanovic

Catalogue Butterfield & Butterfield A44 - sale Rolf H. Mьller - December 1994

The Nagant revolvers of South America

Among the various revolvers manufactured by the firm Nagant for different countries, those intended for Brazil and Argentine are undeniably the least known. Nagant's catalogues of 1895 and 1910 indicated the delivery of revolvers to the Brazilian armed forces (Cavalry and Marine) but did not mention the year. On some very scarce examples of these arms, which sometimes pop up, the cylinder was struck with a Liиge proof-mark that was used only until 1893.



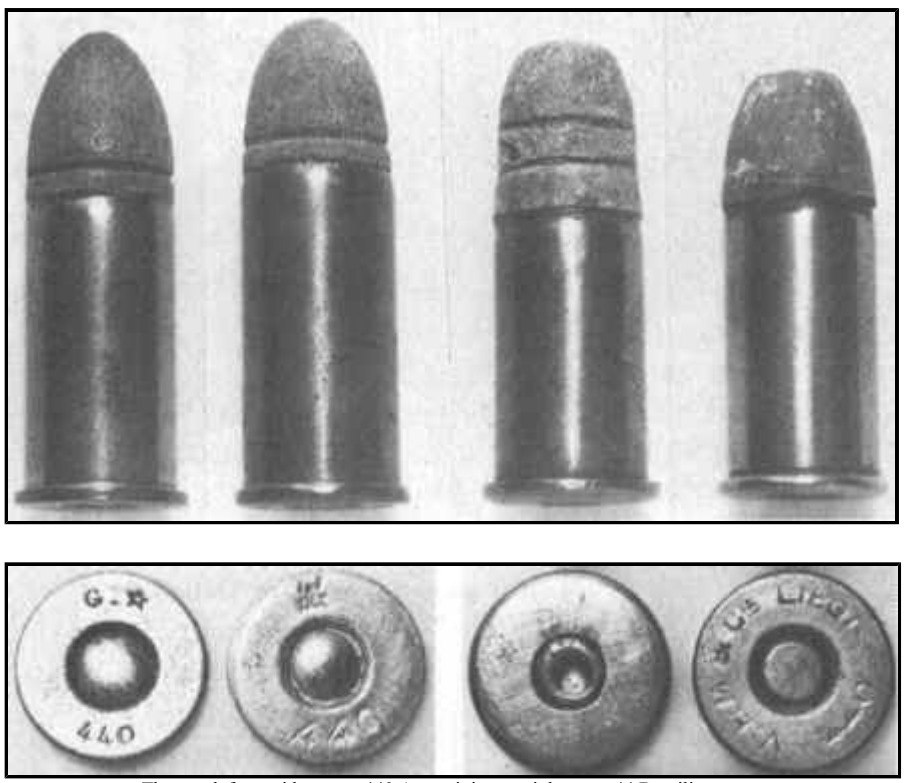
As a consequence those revolvers could not be produced after that year. It is of note that close copies - the parts being interchangeable with original Nagant's - of these weapons, which were made by the German firm Simson and Co of Suhl, were also available on the commercial market. One of these rare pieces, sporting a nickel finish, is shown below.

South America Nagant - cal. 11 mm - Simson made (Germany) - to be sold for $395 :
http://www.collectiblefirearms.com

In the light of the known examples with explicit markings that show that Nagant revolvers were destined for Brazil, one can reasonably conclude that Argentina was also a user of this model.

The GB marking stands for : Government of Brazil and on the right picture "MARINHA DOS E.U. DO BRAZIL".

Argentina could have used a model quite similar to the Brazilian one. Infact, two cartridges are known to exist with the label : .44 Nagant Brazilian (11,2x20R) and .440 Nagant Argentinian (11,2x22R).



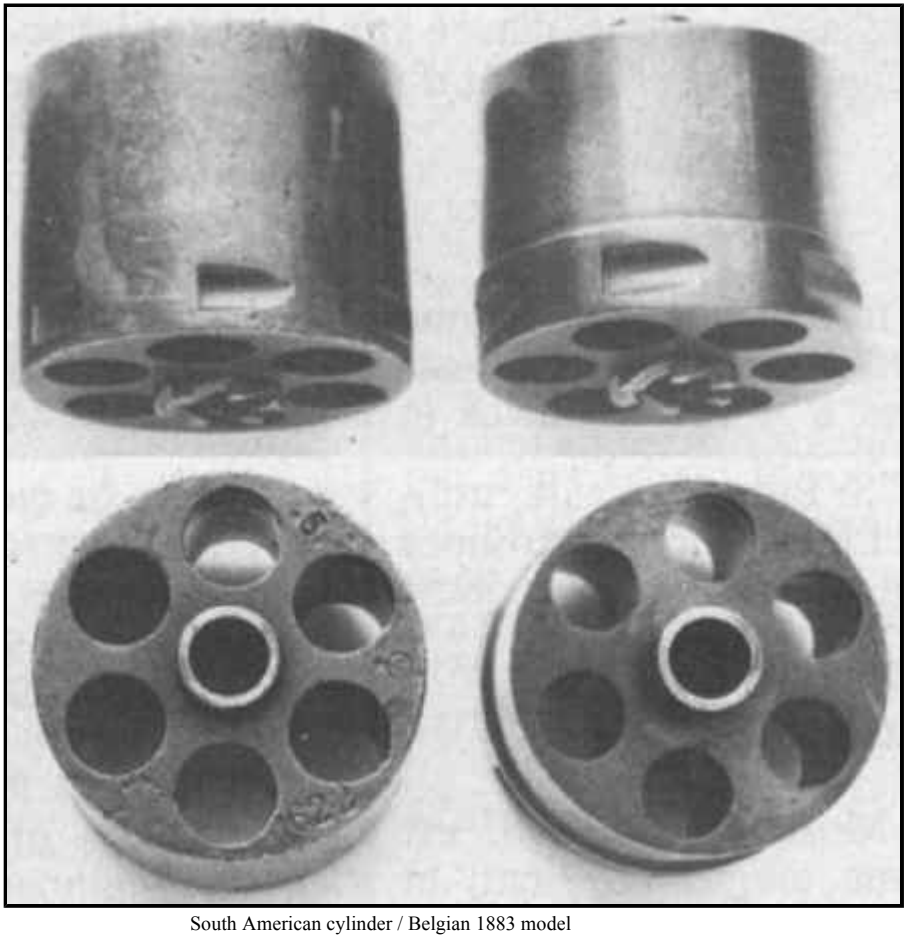
The two left cartridges are .440 Argentinian; at right, two .44 Brazilian.

	.44 Nagant (Brazil)	.440 Nagant (Argentine)
	(11,2 X 20 R)	**(11,2 X 22 R)**
Caliber	11.00 mm to 11.20 mm	10.90 mm to 11.00 mm
Total length	32.95 mm to 33.75 mm	34.85 mm to 35.90 mm
Case :		
Mouth diam.	11.00 mm to 11.15 mm	11.02 mm to 11.15 mm
Body diam.	11.10 mm to 11.22 mm	11.05 mm to 11.18 mm
Base diam.	12.70 mm to 13.15 mm	12.52 mm to 12.70 mm

Case length	19.76 mm to 20.47 mm	21.74 mm to 22.73 mm
Priming type	Berdan	Berdan or Boxer
Initial speed	213 m/sec	216 m/sec
Bullet type	Lead	lead

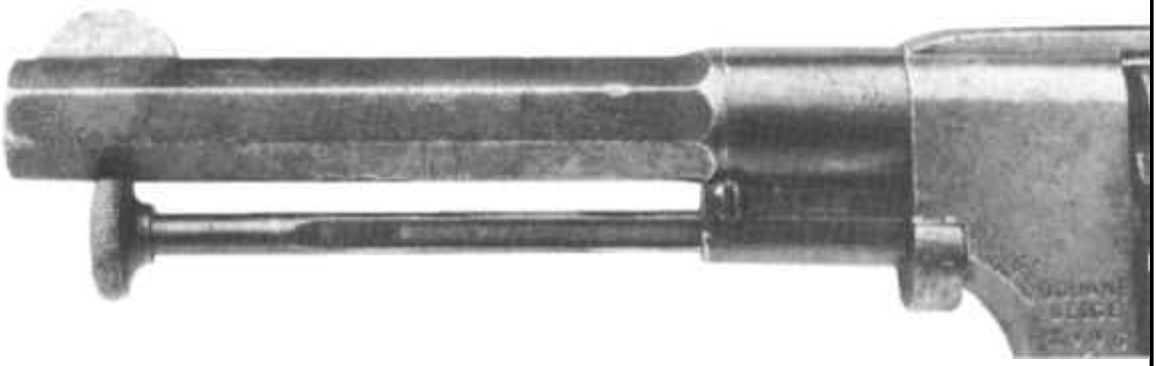
The South American Nagant revolvers are very close to the Belgian 1878 and 1886 models. There are however some obvious differences.

- **The South American Nagant's sported a longer and thicker barrel.**
- **The cylinder, with a broader external diameter (43 mm instead of 41 mm), was unfluted and the rear portion had no raised ring. The bolt notches thus were machined at a level even with the cylinder's external surface.**

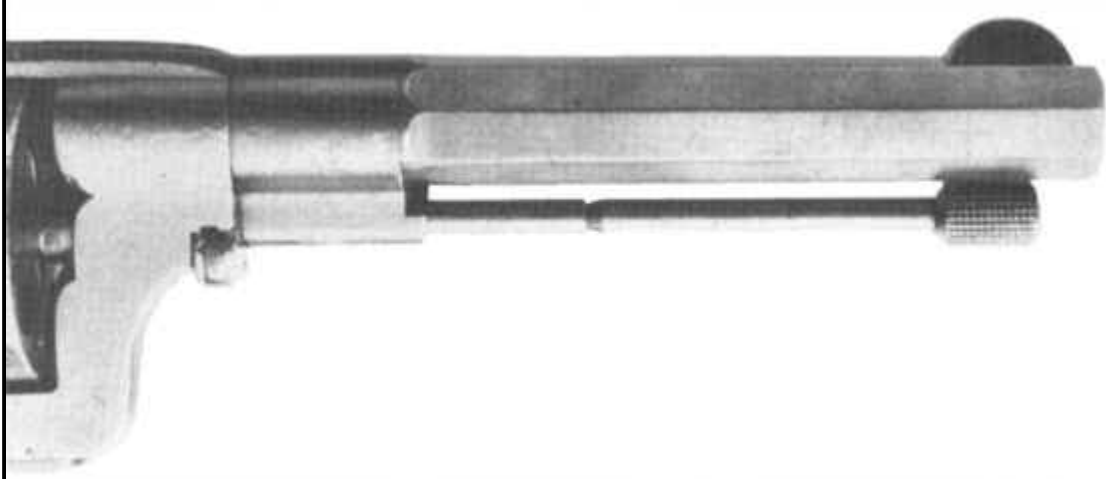


South American cylinder / Belgian 1883 model

- **The ejector rod is also of note. In the South American model, the handling head was longer with a shape similar to the one found in the small caliber Swedish model. Moreover, the rod locking system is different. There is no long groove running along the rod, only a simple circular stop notch at mid-length in the same manner as with the Belgian 1878 model.**



South American Nagant



South American and Belgian M1886 comparison

	South Amer. Nagant	Belgian Nagant M1886
Total length	275 mm	269 mm
Barrel length	119 mm	112 mm
Weight	1,150 g.	1,100 g.
Capacity	6	6
Cylinder diam.	43 mm	41 mm
Barrel shape	octagonal	octagonal
Cylinder length	35.2 mm	34.1 mm
Rifling	5	4
Lock type	SA and DA	SA and DA
Fisnish	Black	Black
Ejector rod	Swedish type	Belgian M1878 type

Bibliographical and pictures sources :

- Les revolvers et les fusils Nagant by Claude Feys and Renй Smeets (Editions Jacques Grancher - 1982)
- Handguns of the World by Ezell
- Belgian revueAMI no 46 (October 1983)

The revolver Nagant Mod. 1910

When Lйon Nagant passed away in 1900, a new generation took over the operations. At that time there was far more interest in the up-surging automobile industry than the firearms business which was facing a slowdown and which was mutating towards the increasingly demand for automatic pistols that were not in the range of products that had been mastered by the firm. A tangible sign of the new trend was the newly adopted commercial name : "Fabrique d'Armes et Automobiles Nagant frиres".

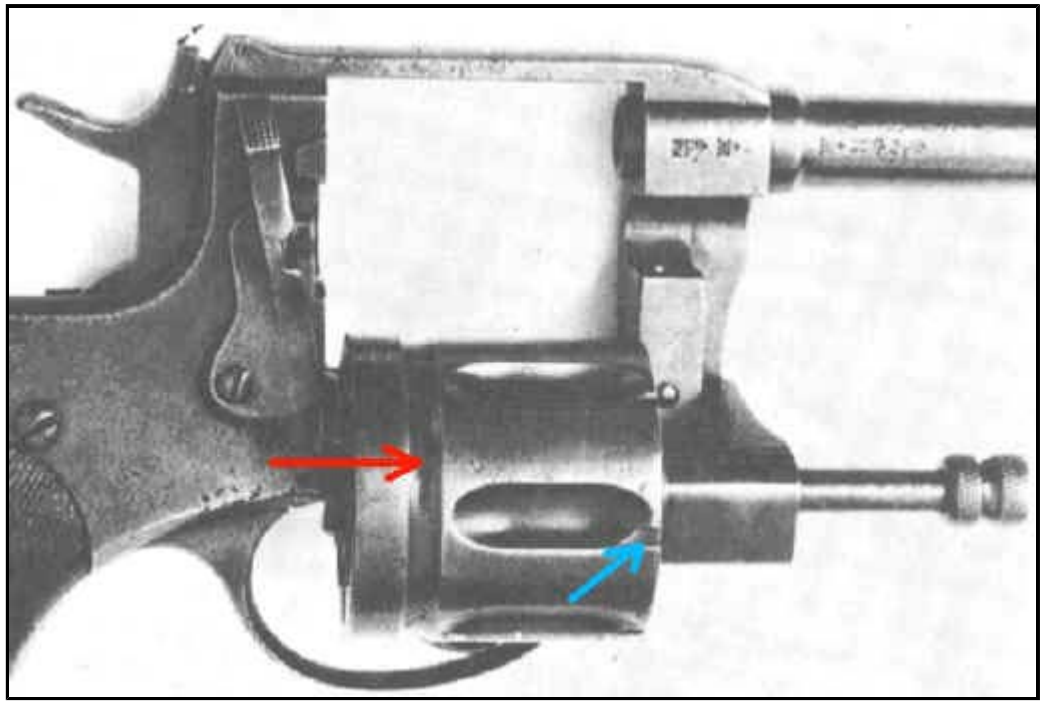
Probably in a desperate effort to compete with the emerging automatic pistol designs that were steadily spreading through both the commercial and military markets - Belgium adopted a FN Browning model in 1900 -, the Nagant brothers decided to try to improve their model 1895 which, though of proven quality, suffered nevertheless some obsolete features.

Based on research that began around 1908, a new model became available in 1910. Keeping all the "gas seal" features of the model 1895, it also had a right-swinging cylinder with a collective central extractor inspired by the French service revolver Saint-Etienne model 1892.

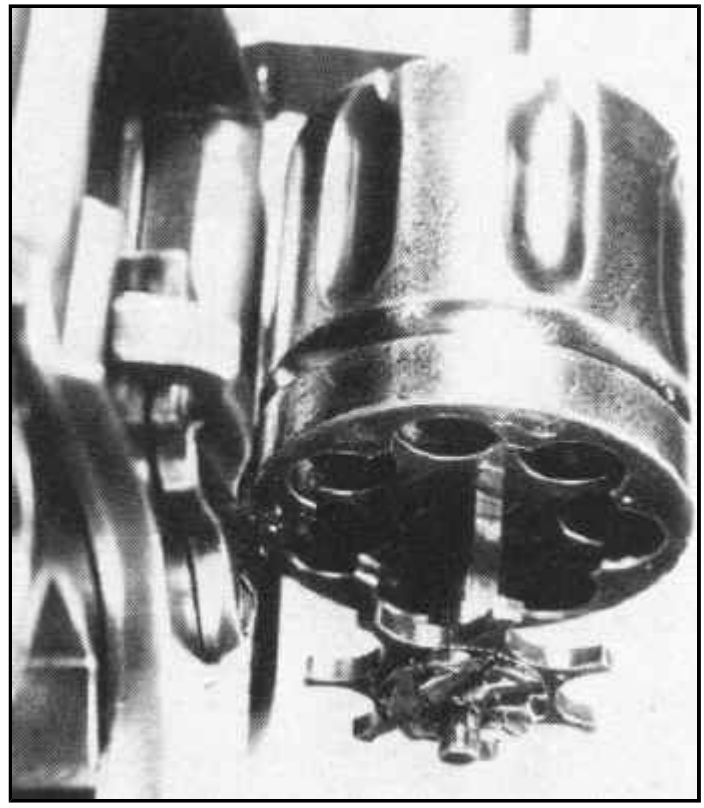
Nagant Mod. 1910 - cal. 7.62 mm -

The cylinder bore a characteristic circular groove towards the rear end (red arrow) and the stop notches were placed

at the front (blue arrow), which was very unusual.



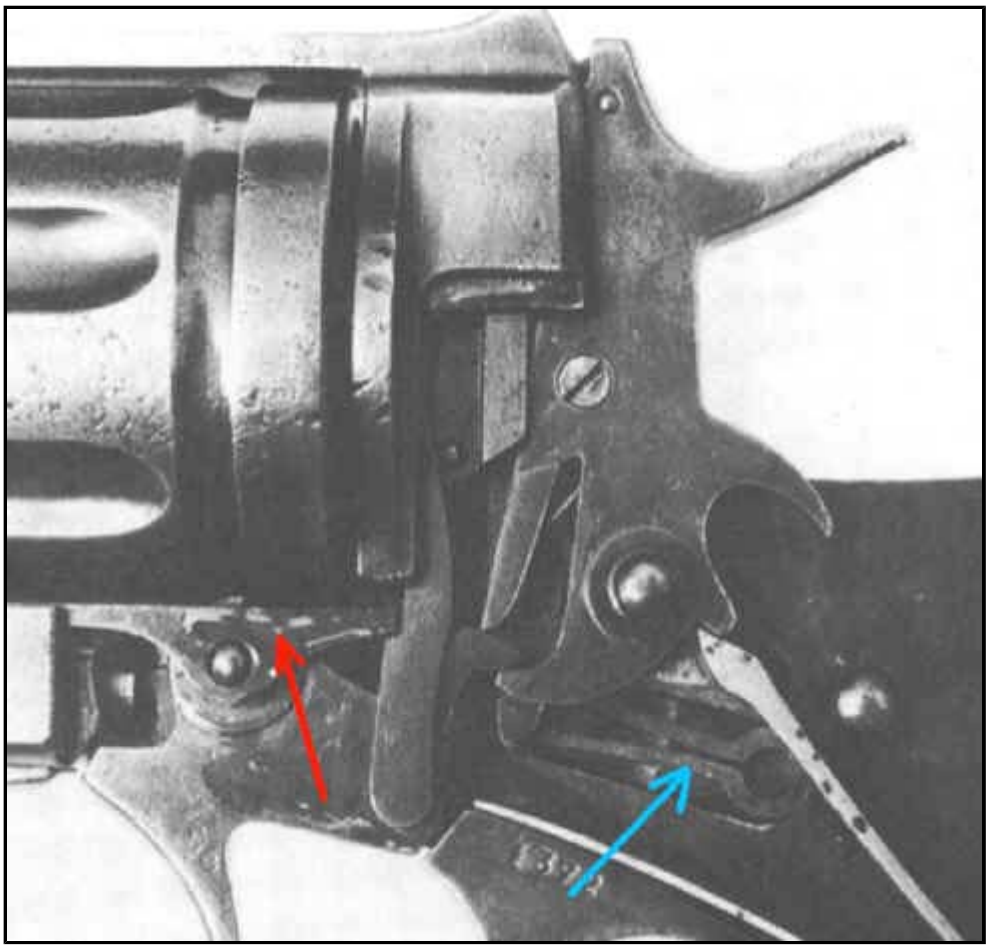
The collective star-shaped central extractor was made in one piece with the ratchet. The extractor tip ahead of the ratchet was maintained by the former loading gate which was now just a lock. Also the "loading gate" swung backward instead of sidewards.



collective star-shaped extractor

The internal mechanism, which already had reached a high degree of complexity due to the "gas seal" feature was now even more complex with the addition of the parts needed to manage the side-swinging cylinder. Notably there was a spring that nested in a machined room in the frame wall (blue arrow), to serve the "loading gate" which now

acted as a cylinder lock. Another new part (red arrow), which rotated around the same axis as the trigger, was added to engage the front cylinder stop notches.



This model did not meet with commercial success. As was said before, it had become more and more obvious that the automatic pistol was going to gradually replace the revolver in the mind of military authorities throughout Europe. And without a sustaining military market, the dice were loaded for failure.

Another Belgian firm, William GRAH, also ventured to produce a revolver based on the same mechanical features and which fired the same cartridge (7.62 Nagant). Strangely enough it seems that no patents covering the improvements over the model 1895 are known to have been secured by the Nagant firm. On the other hand, three patents were granted to William GRAH for its model 1910.

William GRAH's patents

No 223369 - February 11,1910 *(invention)* : first patent describing the whole system.

No 223770 - February 23, 1910 *(improvement)* : breech block modifications.

No 227860 - July 25, 1910 *(improvement)* : final drawing of the revolver.

Nagant's patents about firearms

A copy of these patents can be obtained through :

Office belge de la propriŭtŭ industrielle
North Gate
154, Bd Emile Jacquemin
1200 Bruxelles
(Copies service tel. number : 02/2064149 - 50 - 51)

No 25924 - July 13, 1869 *(invention)* : striker lever and striker stop for Remington rolling-block system.

No 26970 - January 26, 1870 *(invention)* : with Mr. Bachmann, a in-house shooting appliance.

No 27667 - May 31, 1870 *(invention)* : adaptation of the rolling-block system to double-barrelled shotguns.

No 29046 - July 17, 1871 *(improvement)* : new improved extractor for the rolling-block system.

No 31225 - September 19, 1872 *(improvement)* : fitting of the new extractor and striker lever to double-barrelled shotguns.

No 33765 - December 19, 1873 *(invention)* : fitting of the Remington-Nagant system to firearms of all calibers.

No 39340 - April 14, 1876 *(invention)* : single trigger for double-barrelled shotguns.

No 39512 - May 9, 1876 *(invention)* : fast loading for a rolling-block rifle.

No 41590 - February 27, 1877 *(invention)* : modification relating to the fast loading design.

No 42456 - June 15, 1877 *(improvement)* : modification relating to the single trigger design for double-barrelled shotguns.

No 42907 - August 25, 1877 *(invention)* : revolver model 1878.

No 44563 - March 14, 1878 *(improvement)* : modification regarding the model 1878.

No 44954 - April 24, 1878 *(improvement)* : new ejector rod for the model 1878.

No 46620 - November 14, 1878 *(improvement)* : removable trigger guard for rifles.

No 50871 - March 17, 1880 *(improvement)* : adaptation of the revolver model 1878 for the single-action mode.

No 51269 - April 24, 1880 *(improvement)* : bayonet holder.

No 59517 - November 8, 1882 *(improvement)* : modification about the fast loading rifle.

No 61151 - April 19, 1883 *(improvement)* : another modification for the fast loading rifle.

No 61794 - June 23, 1883 *(invention)* : Comblain rifle accessories.

No 63999 - January 30, 1884 *(improvement)* : another modification for the fast loading rifle.

No 79324 - October 26, 1887 *(invention)* : Nagant rifle fitted with an horizontaly moving bolt.

No 83431 - September 29, 1888 *(improvement)* : modification regarding the Nagant rifle.

No 84016 - November 21, 1888 *(improvement)* : modification regarding the Comblain rifle.

No 84225 - December 10, 1888 *(improvement)* : new loading clip for the Nagant rifle.

No 84779 - January 26, 1889 *(invention)* : new steel hardening process.

No 87203 - July 30, 1889 *(invention)* : Nagant rifle with a Mauser type bolt (Mosin-Nagant).

No 87874 - September 28, 1889 *(improvement)* : New safety for the Nagant rifles.

No 93345 - January 6, 1891 *(improvement)* : modification regarding the Mosin-Nagant rifle.

No 95370 - June 22, 1891 *(improvement)* : modification regarding the Mosin-Nagant rifle.

No 98446 - February 18, 1892 *(invention)* : Comblain rifle accessories.

No 99113 - April 5, 1892 *(invention)* : Details about the "gas seal" revolver.

No 99346 - April 14, 1892 *(invention)* : transformation of the Berdan rifle.

No 107902 - December 20, 1893 *(improvement)* : new loading clip for the Mosin-Nagant rifle.

No 116198 - June 17, 1895 *(improvement)* : final drawing of the "gas seal" revolver.

Butterfield&Butterfield sale of 06/12/1994 (catalogue A44)

European military revolvers coming from the Rolf H. Мьller's collection

Model	Type	Caliber	Serial #	Quality	Country	Maker	Price $
DA = Double Action | SA = Simple Action | Caliber in mm | Quality = remaining % of the original finish							
1878	DA	9.4	1004	90%	Belgium	Nagant	880
1878/83	DA	9.4	275	95%	Belgium	Nagant	770
1883	SA	9.4	331	80%	Belgium	Nagant	550
1878/86	DA	9.4	1426	60%	Belgium	Nagant	715
1883/86	SA	9.4	2743	85%	Belgium	Nagant	605
1883/86	SA	9.4	2637	80%	Belgium	Nagant	605
1883/86	SA	9.4	2825	80%	Belgium	Nagant	550
1886	DA	9.4	718	95%	Belgium	Nagant	715
1886	DA	9.4	464	95%	Belgium	Nagant	495
1886	DA	9.4	674	95%	Belgium	Nagant	660
1895	DA	7.62	E5720	60-75%	Finland	Nagant	550
1895	DA	7.62	fno.4030	75-80%	Finland	Tula	385
1895	DA	7.62	3120	65-75%	Finland	Tula	330
1895	DA	7.62	2143	67-70%	Finland	Tula	330
1920	DA	7.62	3029	90%	Lithuania	Tula	935
1920	SA	7.62	11312	90%	Lithuania	Tula	440
1920	SA	7.62	2706	60-70%	Lithuania	Tula	330
1884	Bayonet	9.4	7	50-60%	Luxembourg	Nagant	1320
1884	Bayonet	9.4	25	40-50%	Luxembourg	Nagant	1210
1884	Officer	7.5	5291	90%	Luxembourg	Nagant	660
1884	Safety	7.5	790	90%	Luxembourg	Nagant	1320
1893	DA	7.5	3464	85-90%	Norvиge	Nagant	770
1893	DA	7.5	10744	60-70%	Norway	Nagant	880
1895	SA	7.62	13868	70-85%	Poland	Tula	357
1930	SA	7.62	6090	80-90%	Poland	Radom	770
1930	SA	7.62	8998	90%	Poland	Radom	990

1895	DA	7.62	E17008	95%	Russie	Nagant	825
1895	SA	7.62	M651	75%	Russia	Nagant	440
1895	SA	7.62	11547	65%	Russia	Tula	440
1895	Remov. stock	7.62	71581	85%	Russia	Tula	1430
1895	SA	7.62	15107	60%	Russia	Tula	500
1895	DA	7.62	3617	90%	Russia	Ijevsk	522
1895	DA	7.62	AA180	90%	Russia	Ijevsk	247
1895	DA	7.62	184783	75%	Russia	Sestrojesk	165
1895	DA	7.62	735	80%	Russia	Sestrojesk	192
1895	DA	7.62	796	85%	Russia	Sestrojesk	165
1895	DA	7.62	127	80-90%	Russia	Ijevsk	302
1895	DA	7.62	62115	95%	Russia	Ijevsk	302
1895	DA	7.62	B801	90%	Russia	Ijevsk	412
1895	DA	7.62	13110	80%	Russia	-	137
1887	DA	7.5	810	99%	Sueden	Nagant	550
1887	DA	7.5	1827	75-85%	Sueden	Nagant	220
1887	DA	7.5	1837	75-85%	Sueden	Nagant	302
1887	DA	7.5	1879	70-80%	Sueden	Nagant	247
1887	DA	7.5	968	99%	Sueden	Husqvarna	522
1887	DA	7.5	588	60-70%	Sueden	Nagant	522
1887	DA	7.5	418	75-85%	Sueden	Nagant	550

Bibliographical and pictures sources :

- Les revolvers et les fusils Nagant by Claude Feys and Renй Smeets (Editions Jacques Grancher - 1982)
- Catalogue Butterfield & Butterfield A44 - sale Rolf H. Mьller - December 1994